

Regulatory Records Documentation

Schlumberger Electrical Logs

Unit 011 RUN

C.R.G. Properties, Ltd. (ORNL)

COMPANY UNION OIL (037-06415)

FIELD W. Long Beach

WELL Oil Operat

Sec. 13-4S-13W.

Casing shoe depth:	Driller	4005	ft.	Started run	6:00	a.m.
	Schlumberger		ft.	Finished run	8:30	a.m.
Bottom Depth:	Driller	4408	ft.	Time well occupied by outfit	2 1/2	h
Max. depth reached by lower elect		4408	ft.	Time waiting at well	none	h
Max. footage measured (p or S.P.)		394	ft.	Mileage incurred by run	15	M
Footage missed		----	ft.	Total time incurred by run	4	h

MUD CHARACTERISTICS

NATURE Natural

VISCOSITY 20

LEVEL

DENSITY 73

RESISTIVITY 4.4

DIAMETER OF HOLE

7-5/8"

REMARKS

Device: 20"

Schlumberger Electrical Logs

Unit 011 RUN No. 1

COMPANY DATE

FIELD LOCATION

WELL ELEVATION ft.

Casing shoe depth:	Driller	557	ft.	Started run	1:20	a.m.
	Schlumberger		ft.	Finished run	1:30	a.m.
Bottom Depth:	Driller	6018	ft.	Time well occupied by outfit	3	h
Max. depth reached by lower elect		6018	ft.	Time waiting at well	1:00	h
Max. footage measured (p or S.P.)		557	ft.	Mileage incurred by run	15	M
Footage missed		1	ft.	Total time incurred by run	6 1/2	h

MUD CHARACTERISTICS

NATURE

VISCOSITY 19

LEVEL

DENSITY 73

RESISTIVITY 3.6

DIAMETER OF HOLE

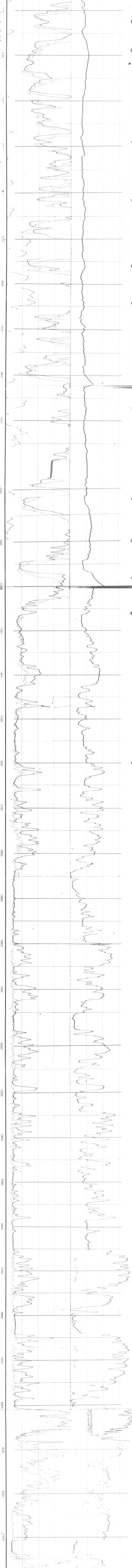
7-5/8"

REMARKS

Device: 20"

Witnessed By

OBSERVERS



SCHLUMBERGER

WELL SURVEYING CORPORATION

APR 8 - 1941
 COMPANY: C.R.G. Properties, Ltd.
 FIELD: (C) (037-06415)
 WELL: NULBA 8-1/2" Oil Operators #4
 SEC: 13 Sec. 13-4S-13W. LONG BEACH
 COUNTY: Los Angeles STATE: CALIFORNIA
 ELEV.: 60

COMPANY: UNION OIL CO.
 FIELD: Long Beach
 WELL: Oil Operators #4
 COUNTY: Los Angeles
 FILING

RUN	1-D	2	3	4	5
Date	4-2-41				
Csg. shoe	4408'				
Total depth	5379'				
Depth rchd.	5375'				
Ft. Meas.	965'				
Mud Nat.	Natural				
Dens	74				
Visc	41				
Res	4.0 @ 74.0°				
Max. Temp.					
Meas. from					
Tension	2000#				
Rig Time	4 hrs.				
Mileage	10				
Observer	R. Forsythe				
Witnessed by	Mr. H. Winter				

DIAMETER OF HOLE

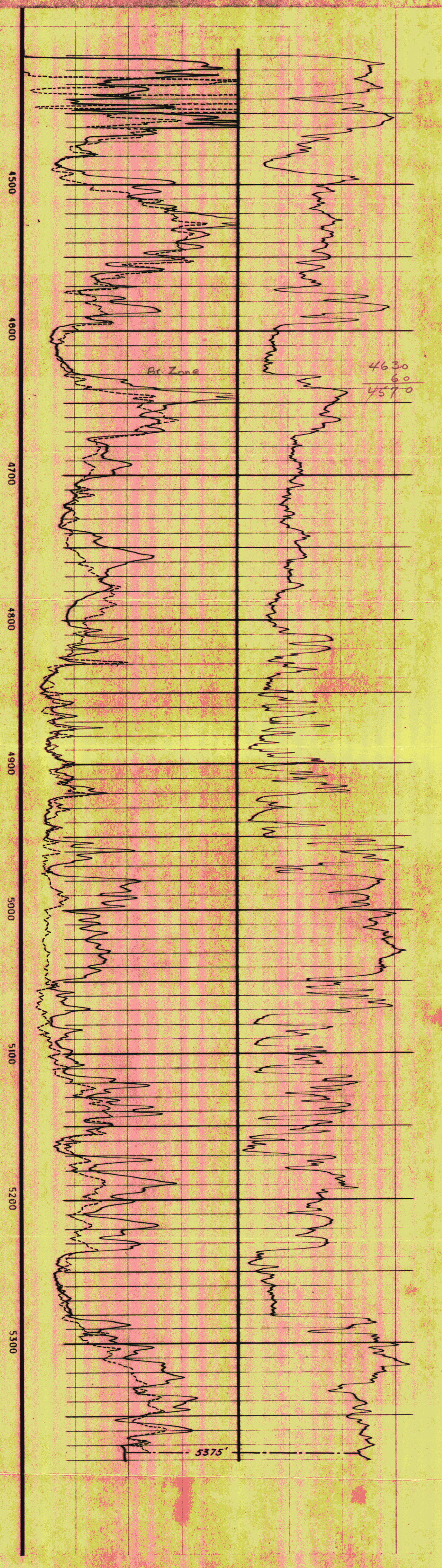
5-5/8" to 5379'

REMARKS

Device: Standard

Mud sample taken while drilling at 5374' (1 only)

DEPTH	RESISTIVITY		SELF-POTENTIAL
	NORMAL CURVE	THIRD CURVE	
0	← ohms m ² m →	30	← 100 millivolts →





Temperature Survey

WELL: 8-4

COMPANY: CRG Properties, LTD.
FIELD: Long Beach
COUNTY: Los Angeles STATE: CA

WELL DATA

DATE: 4-26-2005

TYPE LOG: TEMP
TOTAL DEPTH:
GDA: 2,910'
TOP LOGGED INTERVAL: 0'
FLUID LEVEL: 625'
PKR DEPTH:
PLUG BACK DEPTH:
RECORDED BY: John Reece

CASING: 8.625"
TUBING:
TOP PERFORMANCE: 4,435'
BOFW: 2,100'
LINE SPEED: 30 ft/min
DF above Mat:
API: 03706415

EQUIPMENT AND TEST DATA

PRESSURE TBG psi:
PRESSURE CSG psi: 11
WELL STATUS: Static

TRUCK No: 1
TOOL SIZE: 1 1/4"

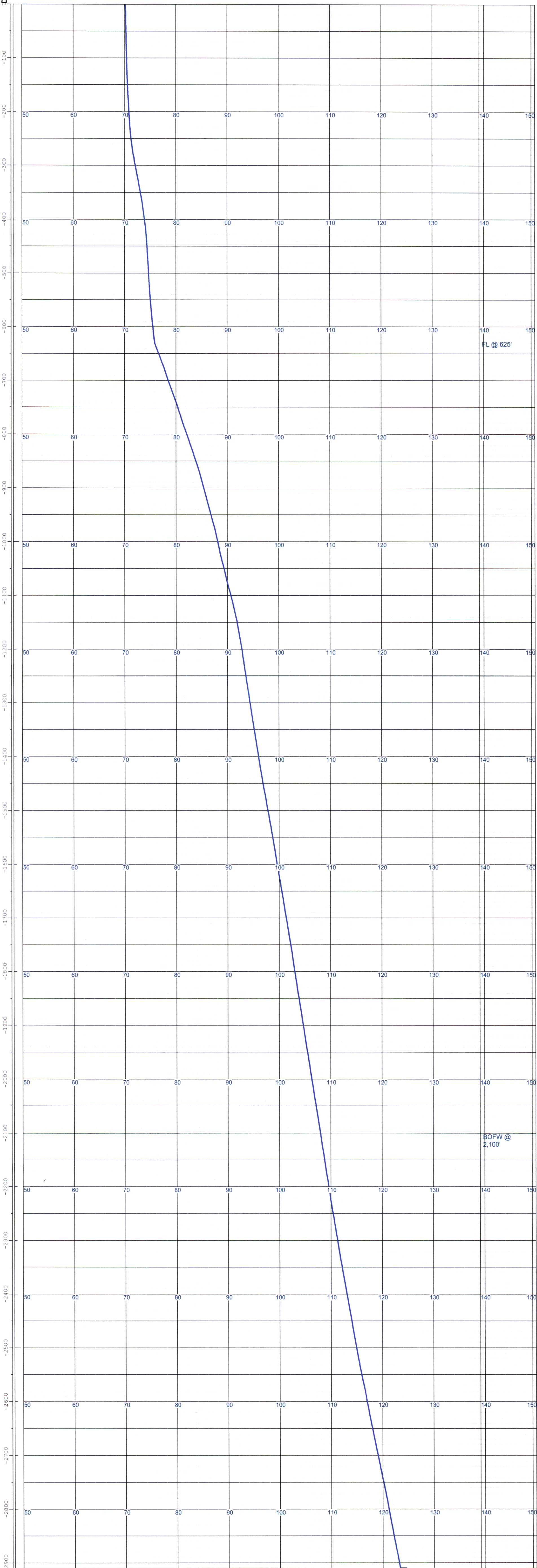
TOOL DATA

CALIBRATED TEMP RANGE:-0.9-253.9deg F
ACCURACY RESOLUTION: 0.25% FS
RESOLUTION: 0.002% FS
COMMENTS: MAX BH TEMP 124.56 F

DEPTH, ft

Temperature

Temperature
(Fahrenheit)





DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 100 Cypress, CA 90630-4731
Phone:(714) 816-6847 Fax:(714) 816-6853
REPORT OF WELL ABANDONMENT

Cypress, California
August 28, 2015

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your report of abandonment of well "**Nwlbu**" 8-4, A.P.I. No. **037-06415**, Section **13**, T. **04S**, R. **13W**, **SB** B.&M., **Long Beach** field, **Los Angeles** County, dated **2/9/2014**, received **3/6/2014**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

- NOTE:** 1. Surface plugging completed on 2/11/2014.
2. Site inspection made and approved on 3/21/2014.
3. This well has been abandoned in compliance with Division permit number 113-0597 issued on 7/19/2013.

Blanket Bond

EM:vm

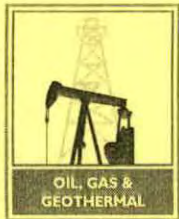
cc:

Steven Bohlen

State Oil and Gas Supervisor

By 

Daniel J. Dudak, District Deputy



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 100 Cypress, CA 90630-4731
Phone: (714) 816-6847 Fax: (714) 816-6853

No. T 115-0587

REPORT ON OPERATIONS

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Cypress, California
July 13, 2015

Your operations at well "**Nwlbu**" 8-4, A.P.I. No. **037-06415**, Sec. **13**, T. **04S**, R. **13W**, **SB B.&M.**, **Long Beach** field, in **Los Angeles** County, were witnessed on **2/11/2014**, by **Michael Okafor**, a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION: **APPROVED**

NOTE: The required Class II2M blowout prevention equipment was inspected and approved on **1/23/2014**.

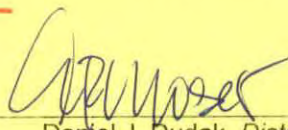
DEFICIENCIES NOTED AND CORRECTED: None

MO/epm

EXPIRED _____
CANCELLED _____
MAILED _____
EMAILED _____

Steven Bohlen
State Oil and Gas Supervisor

By _____
For _____


Daniel J. Dudak, District Deputy

FMM
7/13/2015

115-0587

CEMENTING/PLUGGING MEMO

Operator C.R.G Properties Well No. "Nwlbu" 8-4
 API No. 037-06415 Sec. 13 T. 4S R. 13W SB B&M
 Field Long Beach , County Los Angeles . On 2/11/15
 Mr. / Ms. Michael N. Okafor representative of the supervisor, was present from 1000 to 1200 .

There were also present _____

Casing record of well: 18 5/8" cem 50'; 13 3/8 cem 757'; 8 5/8" cem 4005' WSO, drilled thru 3165', cp 2465', pulled fr 220'; 5-1/2" cem 3017'- 5924', perf 4375' WSO, perfs 5712'-5776'. TD (present hole) 5925'. Plugged w/cem 5925'-2805', w/245 cf cem below 2217', w/cem 2217'-2117'±, 210'-0.

The operations were performed for the purpose of: Abandon (1)

☒ The plugging cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____ are approved.

Hole size: 17 " fr. 50 ' To 757 ' , 12 1/4 " to 4005 ' & 7 5/8 " To 5925 ' ,

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
5-1/2"	15.5#	3017'	5924'	1/17/14	T@ 5878'	446cf	5878'	2805'	0	400 psi	Prod perfs
8-5/8"	32/36#	0	4005'	1/29/14	T@ 2475'	245 cf	2080'	2217'	159 cf	1000 psi	2475'-2465'

Casing/tubing recovered: 8-5/8 " Shot/cut at 220 ' , _____ ' , _____ ' , Pulled fr. 220 ' ;
 _____ " Shot/cut at _____ ' , _____ ' , _____ ' , Pulled fr. _____ ' ;
 _____ " Shot/cut at _____ ' , _____ ' , _____ ' , Pulled fr. _____ ' ;

Junk (in hole): _____

Hole fluid (bailed to) at _____ ' . Witnessed by _____

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
80/30	1/28/14	25	2805'		2400	C.L.Cullum
72/30	1/30/14	120	2117		100	J. Collender

Note: BOPI Class IIM 1/23/14 CLC

c/o 5875'

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
1/27/2014	446 cf	T@ 5875'	1000	C.L.Cullum	2805'	3000#	1/28/14 0715	C.L.Cullum
1/29/2014	245 cf	T@ 2475'	0800	Z. Amilhussin	2217'	3000#	1/30/14 0910	J. Collender
1/30/2014	34 cf	T@ 2217'	1100	J. Collender	2117±	----	-----	-----
2/3/2014	225 cf	T@ 210'	1100	C. Wicker	20'	ATW	2/10/14 1400	P. Kaufman
2/10/2014	23 cf	T@ 20'	1530	P. Kaufman	0	----	2/11/14 1200	M. Okafor

CONTRACTOR:

allenco

UNCORRECTABLE DEFICIENCIES:

None

DEFICIENCIES NOTED AND CORRECTED:

None

CHECK LIST – RECORDS RECEIVED AND WELL STATUS

Company:	C.R.G. Properties,LTD	Well: NWLBU 8-4
API#:	037-06415	Sec. 13 , T. 4S , R. 13W . S. B. B. & M.
County:	Los Angeles	Field: Long Beach

RECORDS RECEIVED	DATE	STATUS
Well Summary (Form OG100)	3/6/2014 (2)	Active ☐ Drilling ☐
History (Form OG103)		Abandoned ☐ Idle ☐
Core Record (Form OG101)		Reabandoned ☐ Other ☐
Directional Survey		
Sidewall Samples		
Date final records received.		
Electric Logs:		
Other:		

WELL TYPE	
Oil ☐	Waterflood ☐
Gas ☐	Water Disposal ☐
Water Source ☐	Cyclic Steam ☐
Observation ☐	Steam Flood ☐
Exploratory ☐	Fire Flood ☐
Dry Hole ☐	Other ☐

EFFECTIVE DATE:	2-12-14
REMARKS:	

ENGINEERS CHECK LIST	CLERICAL CHECK LIST
☐ Summary, History & Core Record (Dupl.)	Location change
☐ Electric Log	Elevation change
☒ Operator's Name	Form OGD121
☒ Signature	Form OGD150b (Release of Bond)
☒ Well Designation	Duplicate logs to archives
☐ Location	Notice of Records Due
☐ Elevation	EDP
☒ Notices	District Date Base
☐ "T" Reports	Final Letter (OG159) 8/26/15 vm
☐ Casing Record	Update Center
☒ Plugs	
☐ Directional Survey	
☒ Production/Injection (FAP Codes: 4/2/03/00)	
☐ E Well on Prod., enter EDP	
☒ Surface Inspection Required 3/21/14 AB OK	FIELD CHECK LIST
☐ Surface inspection Waived (Island)	Date Surface Inspection Completed: 3/21/14 - AB
☐ Well site restoration deferred (common cellar)	Other:
☒ Final Letter Required AB: ☒ REAB: ☐	
☐ Other:	

RECORDS NOT APPROVED	RECORDS APPROVED
(Reason:)	(Signature) 7/28/15
	RELEASE BOND
	Date Eligible
	(Use date last needed records received.)
	MAP AND MAP BOOK

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
HISTORY OF OIL OR GAS WELL

Operator C.R.G. Properties, LTD Field Long Beach County Los Angeles
Well "NWLBU" 8-4 Sec. 13 T. 04S R. 13w sbB.&M.
A.P.I. No. 037-06415 Name Mick Beyer Title Operations Manager
(Person submitting report) (President, Secretary, or Agent)
Date 02-09-14
(Month, day, year)

Signature M. B.

Address 2109 Gundry Ave. Signal Hill, Ca. 90755

Telephone Number 562 989-6100

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

01-23-14	M.I.R.U. - Installed and tested BOPE-Witnessed by C. Cullum w/DOGGR - Secured Well
01-24-14	R.I.H. W/5 1/2" Scraper on 2 7/8" Tubing tagged fill at 5850' - Circ.with water w/returns of oily water and gas - P.O.H. - Witnessed by E. Tabor w/ DOGGR - Secured well
01-27-14	R.I.H.W/Tbg. Tagged at 5875' - Mixed and pumped 446 cu/ft. (391 sxs) class G cement Witnessed by Z. Amilhussin w/DOGGR - Secured well.
01-28-14	R.I.H. Tagged cement at 2805' - Pumped 25 bbls. 73# mud Prs. Tested casing at 500 psi good P.O.H. R.I.H. W/ 8 5/8" scraper to 2800' - P.O.H. - R.I.H. W/CBL - Perforated from 2475' to 2465' - P.O.H. Witnessed by C. Cullum w/DOGGR - Secured well
01-29-14	R.I.H. w/tbg.tail at 2475' mixed and pumped 245 cu/ft.(215 sxs) class G cement - Squeezed away 134 cu/ft prs. At 1000 psi. - Witnessed by Z. Amilhussin w/ DOGGR - secured well
01-30-14	R.I.H. Tagged cement at 2217' = 67' low - Pumped 120 bbls. 73# mud - prs. Tested csg. 500# good - mixed and pumped 34 cu/ft.(30 sxs) class G cement - P.O.H.- R.I.H. Cut 8 5/8" at 220' Witnessed by J. Collender w/DOGGR -secured well
01-31-14	Removed B.O.P.E. Pulled 220' of 8 5/8 " casing - Witnessed by Z. Amilhussin w/DOGGR - secured well
02-03-14	R.I.H. W/tbg. Tail at 210' mixed and pumped 225 cu/ft.(197 sxs) class G cement - cement to surface - P.O.H.- Witnessed by C. Collum w/DOGGR - R.D.M.O.
02-10-14	Dug down around well and cut casing 5' below surface - Topped off surface plug w/ 23 cu/ft.(20sxs) class G cement Witnessed by P. Kaufman w/DOGGR - Secured well
02-12-14	Z. Amilhussin w/DOGGR witnessed surface tag and welding of I.D.Plate - Backfilled well location - Job complete.



BLOWOUT PREVENTION EQUIPMENT MEMO

Operator C.R.G. Properties, LTD

Well "NWLBU" 8-4

Sec. 13 T. 4S R. 13W

Field Long Beach

County L.A.

Spud Date

VISITS:

Date

Engineer

Time

Operator's Rep.

Title

1st 1/23/14

Callie L. Cullum

(1515 to 1530)

2nd

(to)

Contractor Allenco

Rig # 2

Contractor's Rep. & Title Derick Beyer, Driller (Allenco)

Casing record of well: memoOPERATION: Testing (inspecting) the blowout prevention equipment and installation. Critical well? Y ☒ N ☐

DECISION: The blowout prevention equipment and its installation on the 8 5/8" casing are approved.

Proposed Well Opns: Abandonment

MACP:

psi

Hole size:

" fr.

' to

' to

' &

' to

REQUIRED BOPE CLASS:

II3M

CASING RECORD OF BOPE ANCHOR STRING

Size	Weight(s)	Grade(s)	Shoe at	CP at	Cement Details		Top of Cement	
							Casing	Annulus
8 5/8"	32#		1262'					

BOP STACK**TEST DATA**

API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul	Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.
Rd	2 7/8	Townsend	81	9	3M		1						
Rd	CSO	Townsend	81	9	3M		1						

ACTUATING SYSTEM

TOTAL: 2

AUXILIARY EQUIPMENT

Accumulator Unit(s) Working Pressure				psi						Connections		Test Press.		
Total Rated Pump Output				gpm		Fluid Level		No.	Size (in.)	Rated Press	Weld		Flange	Thread
Distance from Well Bore				25 ft.		ok								
Accum. Manufacturer				Capacity		Precharge				Fill-up Line				
1				gal.		psi		x	Kill Line				X	
2				gal.		psi		x	Control Valve(s)		3	3M	X	
CONTROL STATIONS				Elec.		Hyd.		Pneu.		Check Valve(s)				
Manifold at accumulator unit										Aux. Pump Cnnct.				
Remote at Driller's station										Choke Line				
Other: hand pump						x				Control Valve(s)				
EMERG. BACKUP SYSTEM				Press.		Wkg.Fluid				Pressure Gauge				
N ₂ Cylinders		1	L= 55	"	1825 psi	4 gal.				Adjstble Choke(s)				
Other:		2	L=	"		gal.				Bleed Line				
		3	L=	"		gal.				Upper Kelly Cock				
		4	L=	"		gal.				Lower Kelly Cock				
		5	L=	"		gal.				Standpipe Valve				
		6	L=	"		gal.				Stndpipe Pres. Gau.				
TOTAL: 4				gal.				x	Pipe Safety Valve		27/8	3M		
HOLE FLUID				Alarm Type						Internal Preventer				

"NWLBU" 8-4

037-06415

18 5/8"

13 3/16"

8 5/8"

5 1/2"

50'

ETOC 74'

17" HOLE

CEM. 350 SX 751'

12 1/4" HOLE

ETOC 2883'

DRILLED THRU 3165'

3017'

CEM. 400 SX 4005'

PERF 4375' WSD

7 5/8" HOLE

5712

5776'

5924'

5878'

TD (PRESENT HOLE) 5925'

BEW 2250'

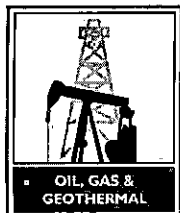
UHZ 2475'

WILBUR 3680'

ALAMITOS 3882'

BROWN 4400'

EFM 9/13



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

No. **P 113-0597**

PERMIT TO CONDUCT WELL OPERATIONS

**CRITICAL WELL
CORRECTED COPY**

Old	New
412	412
FIELD CODE	
03	03
AREA CODE	
00	--
POOL CODE	

Cypress, California
July 19, 2013

Mr Mark Pender, Agent
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your proposal to **Abandon** well "NWLBU" 8-4, A.P.I. No. **037-06415**, Section **13**, T. **04S**, R. **13W**, **SB B. & M.**, **Long Beach** field, **Northwest Extension** area, **Brown** pool, **Los Angeles** County, dated **7/10/2013**, received **7/10/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
 - a. Class **II3M**, with hydraulic controls, during **abandonment** operations.
 - b. A **3M** lubricator for **wireline** operations.
2. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
3. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of **72** lbs/cu.ft and a minimum gel shear strength of **25** lbs./100 sq. ft.
5. The proposed cement plug from **5878'** to **3480'** shall extend from **5878'** to at least **2817'**.
6. Prior to shooting any perforations braidenhead squeezes, a pressure test of the **8-5/8"** casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
7. The well location shall be surveyed prior to burying the well, and the survey shall be filed with this office. Latitude and longitude shall be in decimal degrees, to six decimal places, in NAD83.
8. All casing must be removed from between 5' and 10' below ground level.
9. Well site restoration shall be completed within 60 days following the completion of plugging operations.
10. No program changes are made without prior Division approval.
11. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.

(Continued on page 2)

No Bond Required Bond

cc: Update
EDP
AllenCo.
DOGGR - Dist. 1 (Cypress)

Tim Kustic
State Oil and Gas Supervisor

Engineer Ellen Plaza Moser
Office (714) 816-6847

By _____
For: Daniel J. Dudak, District Deputy

EPM/epm

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

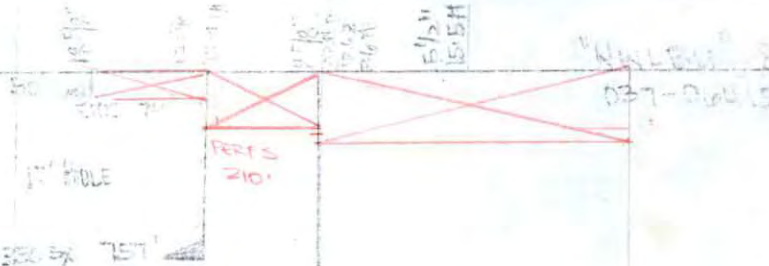
- b. Witness the clean-out depth at **5878'**.
- c. Witness the placing, location and hardness of the cement plug from **5878'** to **2817'**.
- d. Witness the mudding operations.
- e. Witness a pressure test of the **8-5/8"** casing.
- f. Witness the cement squeeze through the **perforations** at **2465'** or through a retainer or packer (if casing integrity is not demonstrated).
- g. Witness the placing, location and hardness of the cement plug from **2475'** to **2150'**.
- h. Witness the cement squeeze through the **perforations** at **200'** through a retainer or packer (if casing integrity is not demonstrated).
- i. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- j. Inspect the restored well site.

NOTE:

- 1. Upon completion of the proposed work, a History of Oil or Gas Well (form OG103) shall be submitted to this office.
- 2. The well abandonment history (History of Oil or Gas Well - form OG103), must include a description of the removal or abandonment of the well flowline and any associated piping.
- 3. Hydrogen sulfide gas (H₂S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
- 4. The operator shall isolate the following zones:
 - a. **Base of the Freshwater Sand at 2250'.**
 - b. **Top of the Upper Gas Zone at 2475'.**
 - c. **Top of the Wilbur Zone at 3680'.**
 - d. **Top of the Alamitos Zone at 3882'.**
 - e. **Top of the Brown Zone at 4400'.**

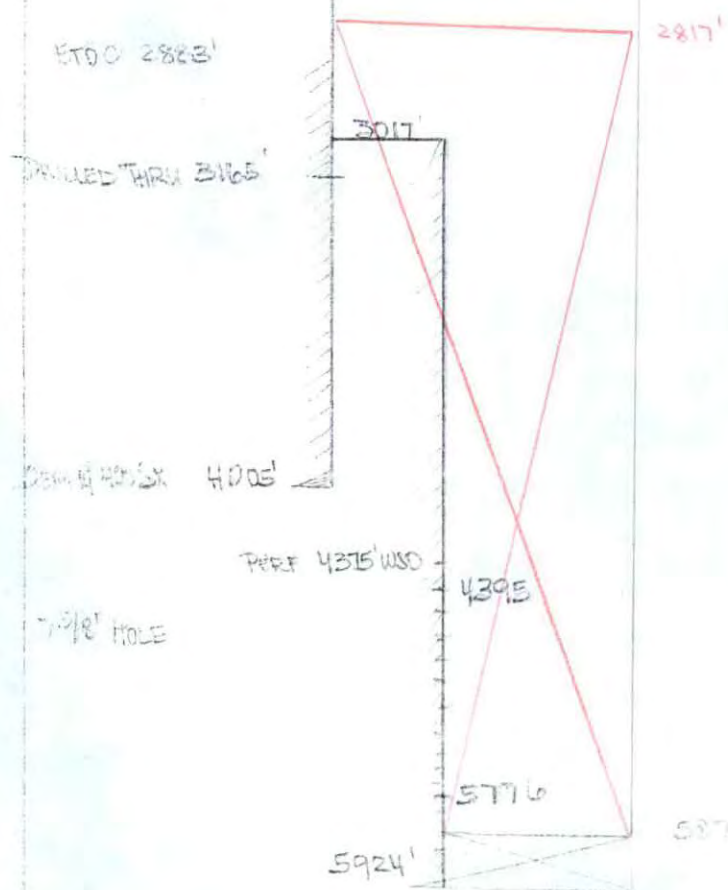
Failure to achieve adequate zonal isolation may have negative impacts on current and future operations. In addition, failure to achieve adequate zonal isolation will also be noted on the Report of Operations (OG 109).

PROPOSED



3FW 2250'

W112 2475'



ETOC 2823'

DRILLED THRU 3165'

W112 3680'

ADAMTOS 3882'

PART 4375 WSO

4395

BROWN 4400'

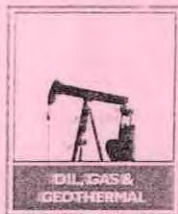
5776

5878

5924'

TO CORRENT REFERENCE

5/11/12



URAL RESOURCES AGENCY OF CALIFOR
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

PERMIT TO CONDUCT WELL OPERATIONS

**CRITICAL WELL
CORRECTED COPY**

No. P 113-0597

Old	New
412	412
FIELD CODE	
03	03
AREA CODE	
00	--
POOL CODE	

Cypress, California
July 19, 2013

Mr Mark Pender, Agent
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your proposal to **Abandon** well "**NWLBU**" 8-4, A.P.I. No. **037-06415**, Section **13**, T. **04S**, R. **13W**, SB B. & M., **Long Beach** field, **Northwest Extension** area, **Brown** pool, **Los Angeles** County, dated **7/10/2013**, received **7/10/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
 - a. Class **II3M**, with hydraulic controls, during **abandonment** operations.
 - b. A **3M** lubricator for **wireline** operations.
2. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
3. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of **72** lbs/cu.ft and a minimum gel shear strength of **25** lbs./100 sq. ft.
5. The proposed cement plug from **5878'** to **3480'** shall extend from **5878'** to at least **2817'**.
6. Prior to shooting any perforations braidenhead squeezes, a pressure test of the **8-5/8"** casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
7. The well location shall be surveyed prior to burying the well, and the survey shall be filed with this office. Latitude and longitude shall be in decimal degrees, to six decimal places, in NAD83.
8. All casing must be removed from between 5' and 10' below ground level.
9. Well site restoration shall be completed within 60 days following the completion of plugging operations.
10. No program changes are made without prior Division approval.
11. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.

(Continued on page 2)

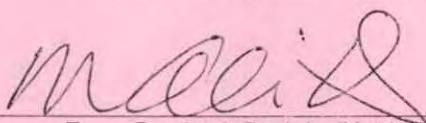
No Bond Required Bond

cc: Update
EDP
AllenCo.
DOGGR - Dist. 1 (Cypress)

Engineer Ellen Plaza Moser
Office (714) 816-6847

EPM/epm

Tim Kustic
State Oil and Gas Supervisor

By 
For: Daniel J. Dudak, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

- b. Witness the clean-out depth at **5878'**.
- c. Witness the placing, location and hardness of the cement plug from **5878'** to **2817'**.
- d. Witness the mudding operations.
- e. Witness a pressure test of the **8-5/8"** casing.
- f. Witness the cement squeeze through the **perforations** at **2465'** or through a retainer or packer (if casing integrity is not demonstrated).
- g. Witness the placing, location and hardness of the cement plug from **2475'** to **2150'**.
- h. Witness the cement squeeze through the **perforations** at **200'** through a retainer or packer (if casing integrity is not demonstrated).
- i. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- j. Inspect the restored well site.

NOTE:

- 1. Upon completion of the proposed work, a History of Oil or Gas Well (form OG103) shall be submitted to this office.
- 2. The well abandonment history (History of Oil or Gas Well - form OG103), must include a description of the removal or abandonment of the well flowline and any associated piping.
- 3. Hydrogen sulfide gas (H₂S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
- 4. The operator shall isolate the following zones:
 - a. **Base of the Freshwater Sand at 2250'.**
 - b. **Top of the Upper Gas Zone at 2475'.**
 - c. **Top of the Wilbur Zone at 3680'.**
 - d. **Top of the Alamitos Zone at 3882'.**
 - e. **Top of the Brown Zone at 4400'.**

Failure to achieve adequate zonal isolation may have negative impacts on current and future operations. In addition, failure to achieve adequate zonal isolation will also be noted on the Report of Operations (OG 109).



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

PERMIT TO CONDUCT WELL OPERATIONS

CRITICAL WELL

No. P 113-0597

Old	New
412	412
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03	03
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POOL CODE	

Cypress, California
July 19, 2013

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5. Prior to shooting any perforations braidenhead squeezes, a pressure test of the **8-5/8"** casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
6. The well location shall be surveyed prior to burying the well, and the survey shall be filed with this office. Latitude and longitude shall be in decimal degrees, to six decimal places, in NAD83.
7. All casing must be removed from between 5' and 10' below ground level.
8. Well site restoration shall be completed within 60 days following the completion of plugging operations.
9. No program changes are made without prior Division approval.
10. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.
 - b. Witness the clean-out depth at **5878'**.

(Continued on page 2)

No Bond Required Bond

cc: Update
EDP
AllenCo
DOGGR - Dist. 1 (Cypress)

Engineer Ellen Plaza Moser
Office (714) 816-6847

EPM/epm

Tim Kustic
State Oil and Gas Supervisor

By *[Signature]*
For: Daniel J. Dudak, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

- c. Witness the placing, location and hardness of the cement plug from **5878'** to **3480'**.
- d. Witness the mudding operations.
- e. Witness a pressure test of the **8-5/8"** casing.
- f. Witness the cement squeeze through the **perforations** at **2465'** or through a retainer or packer (if casing integrity is not demonstrated).
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- i. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- j. Inspect the restored well site.

NOTE:

- 1. Upon completion of the proposed work, a History of Oil or Gas Well (form OG103) shall be submitted to this office.
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- 3. Hydrogen sulfide gas (H_2S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
- 4. The operator shall isolate the following zones:
 - a. **Base of the Freshwater Sand at 2250'.**
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 - c. **Top of the Wilbur Zone at 3680'.**
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Failure to achieve adequate zonal isolation may have negative impacts on current and future operations. In addition, failure to achieve adequate zonal isolation will also be noted on the Report of Operations (OG 109).



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

P# 113-0597

CJ/LM

FOR DIVISION USE ONLY			
Bond	Forms		
	OGD114	OGD121	
BB	7/3/13	7/10/13	df

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ well "Nwlbu" 8-4, API No. 037-06415

(Check one)

Sec. 13, T. 4s, R. 13w, S.B. B.&M., Long Beach Field, Los Angeles County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

See Attachment

The total depth is: 5925 feet.

The effective depth is: 5878 feet.

Present completion zone(s): see attachment

(Name)

Present zone pressure: N/A psi.

Oil or gas shows: see attachment

feet.

Depth to base of fresh water: 2250

feet.

(Name and depth)

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): see attachment

feet.

(Depth of interval)

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes ☒ No ☐

The proposed work is as follows: (A complete program is preferred and may be attached.)

See Attachment.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator

C.R.G. Properties, Ltd

Address

2109 GUNDRY AVE.

City/State

SIGNAL HILL

Zip Code

90755

Name of Person Filing Notice

MICK BEYER

Telephone Number:

562 989-6100

Signature

M. B.

Date

07-10-13

Individual to contact for technical questions:

MICK BEYER

Telephone Number:

310 505-9787

E-Mail Address:

Mbeyer@allencoca.com

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

DOGGR
Received-

JUL 10 2013

to Elox 7/10/13

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

C.R.G. Properties, Ltd. Well "Nwlbu" 8-4 (037-06415), Sec.13, Twn. 4S, Rge. 13W, S.B. B&M, Long Beach Oil Field

According to Division records, the present condition of the well is as follows:

1. **Location:** See map Exhibit A - Attachment II
2. **Accessibility:**
3. **Status:** Idle deserted
4. **Total Depth:** 5925'. **Effective Depth:** 5878'. **Elevation of Kelly Bushing (KB) above sea level:** 60'.
5. **Casing:** 18-5/8" casing cemented 50'; 13-3/8" 36# casing cemented 757' with estimated top of cement behind pipe at 124' +/-; 8-5/8" cemented 4005' with estimated top of cement behind pipe at 2890', WSO; 5-1/2" cemented 3017'-5925'. perfs. 4375' WSO, 5712'-5730', 5734'-5754', 5761'-5776'.
8. **Tubing:** Unknown **Rods:** Unknown
7. **Base of Fresh Water (BFW):** 2250'
8. **Producing Zone(s):** Brown
9. **Hole Fluid:** Unknown
10. **Junk:** Unknown
11. **Plugs:** 5878 to 5925,
12. **Comments:** Top of Brown zone 4400', top of Alamos zone 3882', top of Wilbur zone 3680', and top of Upper Gas zone 2475'.

The following operations are necessary to plug and abandon the well:

1. A Notice of Intention to Abandon (form OG 108) is to be filed with this Division at least 10 days prior to commencing work. Work is not to begin until a Permit to Conduct Well Operations (Form OG 111) has been issued. All well operations are to be witnessed by a representative of this Division as directed in the Permit to Conduct Well Operations.
2. The abandonment contractor will review job safety programs (JSP) with all crewmembers prior to work startup and/or if conditions change. Monitor well for any leaking gas. Position gas monitors and ventilation fans, if warranted before moving in any other equipment or personnel.
3. Adequate blowout prevention equipment, as defined in Division's publication No. M07, shall be installed and maintained in operating condition at all times. The minimum requirements are:
 - a. A 3M rod Reagan or equivalent BOPE for pulling rods and pump operations.
 - b. A Class II3M, with hydraulic controls, during abandonment operations.
 - c. A 3M lubricator for wire line operations.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs/cu.ft and a minimum gel shear strength of 25 lbs. /100 sq. ft. All cement plugs are to have a minimum compressive strength of 1000 psi and maximum liquid permeability of 0.1 md. All depths noted are from the KB.
5. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
6. Kill well. Install and function test rod Reagan or equivalent BOPE. Pull out of the hole with rods and pump.

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

7. Remove rod Reagan. Install and function test Class II3M BOPE (function test BOPE each day thereafter).
8. Pull out all production tubing.
9. Use appropriate combination tools to clean out to 5878'.
10. Run in scraper. Scrape the 8-5/8" and 5 1/2" casings.
11. Run in hole with tubing (if tag high, clean out fill to 5878').
12. The well shall be plugged with cement from 5878' to 3480'.
13. Prior to shooting any perforations for braidenhead squeezes, a pressure test of the casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a packer is required for squeeze operations.
14. The 8-5/8" casing shall be perforated from 2475 to 2465'. Get an injection rate or a breakdown.
15. Sufficient cement shall be squeezed into the perforations to fill to 2150' outside the 8-5/8" casing.
16. The well shall be plugged with cement from 2475' to 2150'.
17. The 8-5/8" casing shall be cut and pulled from 210'.
18. The 13" casing shall be perforated from 210' to 200'. Sufficient cement shall be squeezed into the perforations to fill to surface.
19. The well shall be plugged with cement from 210' to surface.
20. All casing must be removed from between 5' and 10' below ground level.
21. A steel plate, at least as thick as the outer well casing and bearing the last five digits of the API number, shall be tack welded around the top of the outer casing.
22. Cellar, production pads and pipelines shall be removed and the resulting excavations filled with earth and compacted properly to prevent settling.
23. Remaining buried pipelines that cannot be removed shall be purged with clean water. Abandon line by pumping approved cement slurry mixture, weld steel cap on both ends of the line and bury.
24. All equipment, casing, or junk that requires removal to implement restoration to lawful conditions shall be removed and properly disposed of in accordance with environmental laws and in accordance with instructions from the Division of Oil and Gas. All liquid wastes shall be removed and properly disposed.
25. A well History (Form OG 103) shall be filed in duplicate with the Division within 60 days of completing the work and must include a description of the removal or abandonment of the well flow line and any associated piping.

1 DEPARTMENT OF CONSERVATION
2 Division of Oil, Gas, and Geothermal Resources
3 5816 Corporate Avenue, Suite 200
4 Cypress, California 90630
5 Telephone (714) 816-6847
6 Facsimile (714) 816-6853
7

8 **STATE OF CALIFORNIA**
9 **NATURAL RESOURCES AGENCY**
10 **DEPARTMENT OF CONSERVATION**
11 **DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**

12
13 **REVISED**

14
15 **FORMAL ORDER TO:**
16 **PLUG AND ABANDON WELLS &**
17 **RESTORE LEASE CONDITIONS**
18

19
20 **NO. 1032**

21 **Dated: October 18, 2012**

22 **Operator: C.R.G. Properties, Ltd. (C0250)**
23

24 **BY**

25 **Tim Kustic**

26 **STATE OIL AND GAS SUPERVISOR**
27

1 DEPARTMENT OF CONSERVATION

2 Legal Office

3 801 K Street

4 Sacramento, California

5 Telephone (916) 323-6733

6 Facsimile (916) 445-9916

7
8 **STATE OF CALIFORNIA**

9 **NATURAL RESOURCES AGENCY**

10 **DEPARTMENT OF CONSERVATION**

11 **DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**

12
13
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19 **NO. 1032**

20 **Dated: October 17, 2012**

21 **Operator: C.R.G. Properties, Ltd. (C0250)**

22
23
24 **BY**

25 **Tim Kustic**

26 **STATE OIL AND GAS SUPERVISOR**

18 5/8" #10 1/2

13 3/8" 45# 17"

8 5/8" 32# 12 1/4"

6 5/8" 26# 7 5/8"

1/1/38
CEM 46# 50

17" 50-758

1/4/38 CEM 330# 757
(380CF)

ETOC
124

ETOC
2890

T.O.L. 3843

1/23/38 CEM 400 5x 4005
(460CF)

Perf: 4005-4130
3/20/38

Perf: 4348-4408
2/5/38

@ 4344 CP CEM 125#
(144CF)

CEM 4305-4397 25# 3/18-19/38
(29CF)

1/2/38 CEM 41 2/5/38 12 4408

+04408

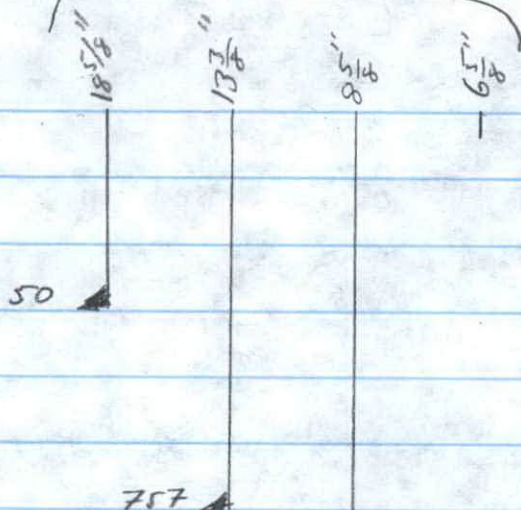
original Hole

1/28/13

037-06415

Sheet 2 of 3

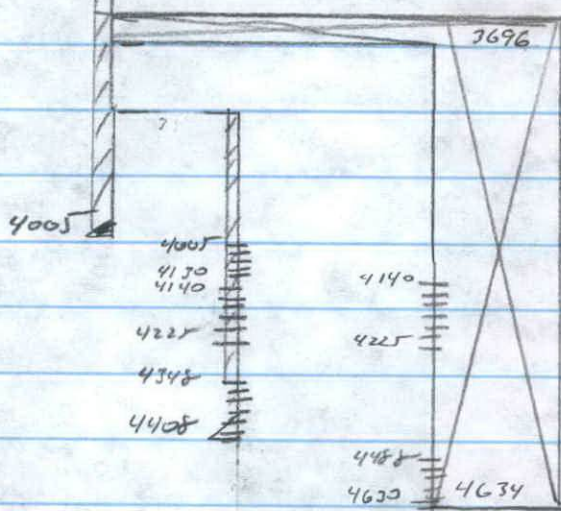
See Sheet 1



4 3/4" 16 #/6 5/8"

ETOC
2890

WINDOW MILLED 3163-7164 for S.T. (see sheet 3)



T.O.C. 3804 (4 3/4")

T.O.C. 3843 (6 5/8")

CEM 3696-4634 100 SX
6/8/67

Perf: 4140-4225
8/26/59 (4 3/4" + 6 5/8")

Perf: 4488-4535
10/45-11/45

Perf: 4850-4920
8/18/45

Perf: 5113-5140, 5280-5325
4/15/41-5/12/41

Re-perf: 5113-5325 6/4/41

4/10/41 CEM 200SX
(230CF)

ETOC
4920
5113

5325
5350
5376

TO 5379

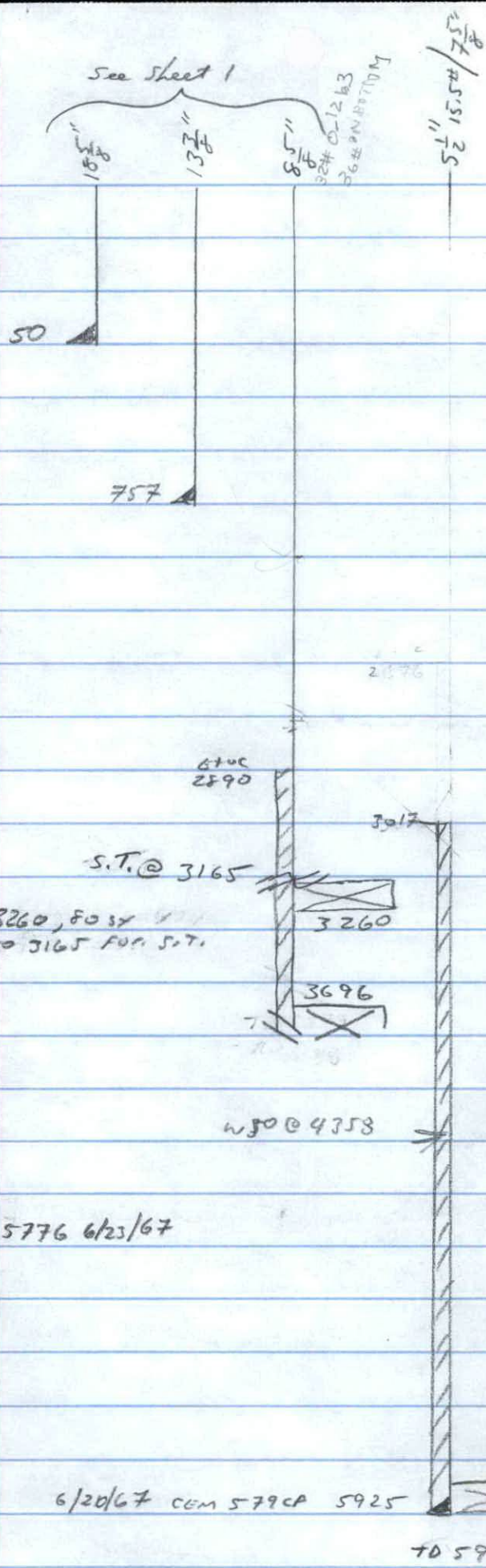
Re-perf: 5113-5350 8/14/44

CEM plug 5361-5376

ADD
1/28/10

* Equivalent to 153 SX drilled out of hole upon cleanout, leaving 47 SX to be outside casing.

RD 1 - New work (deepening w/ no S.T.)



RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF PROPERTY AND WELL TRANSFER

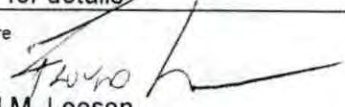
Field or County Long Beach	District District 1 (Cypress, California)
Former owner Pacific Energy Res. P0252	Date July 26, 2000

Well Name	API Number	Section Township Range
"Nwlbu" 5-2	037-00397	Sec. 13-4S-13W
"Nwlbu" 5-3	037-09796	Sec. 13-4S-13W
"Nwlbu" 5-4	037-09797	Sec. 13-4S-13W
"Nwlbu" 8-3	037-06496	Sec. 13-4S-13W
"Nwlbu" 8-4	037-06415	Sec. 13-4S-13W
"Nwlbu" 8-7	037-22512	Sec. 13-4S-13W
"Nwlbu" 9-2	037-13525	Sec. 13-4S-13W
"Nwlbu" 9-3	037-09791	Sec. 13-4S-13W
"Nwlbu" 9-4	037-00392	Sec. 13-4S-13W
"Nwlbu" 9-5	037-00142	Sec. 13-4S-13W
"Nwlbu" 9-6	037-00393	Sec. 13-4S-13W

Description of the land upon which the well (s) is (are) located.

See above

Date of transfer May 9, 2000	New owner C.R.G. Properties, Ltd. C0250	Type of organization Corp./Ltd.
	Address: 15332 Antioch Street, Suite 338 Pacific Palisades, CA 90272	Telephone (310) 808-9071
Reported by	OG34A received 6/2/2000 signed by both parties	
Confirmed by	Same as above	
New operator new status PA	Designation of Agent Mark Pender	
Old operator new status PA	Remarks See operator file for C.R.G. Properties, Ltd. for details	

OPERATOR STATUS ABBREVIATIONS	Deputy Supervisor R. K. Baker	Signature  Floyd M. Leeson Operations Engineer																																										
PA - Producing Active																																												
NPA- No potential, Active																																												
PI- Potential Inactive																																												
NPI-No potential, Inactive																																												
Ab-Abandoned or No More Wells																																												
cc: Update; Envir Dsk; File Conservation Committee Harold W. Bertholf, Inc. LA County Assessor Sacramento EDP Cypress EDP	FORM AND RECORD CHECK LIST <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Form or Record</th> <th>Initials</th> <th>Date</th> <th>Form or Record</th> <th>Initials</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Form OGD121</td> <td>N/A</td> <td></td> <td>Map and Book</td> <td></td> <td></td> </tr> <tr> <td>Operator Card</td> <td></td> <td></td> <td>Notice cancellations</td> <td>N/A</td> <td></td> </tr> <tr> <td>Well Records</td> <td>SR</td> <td>7/27/2000</td> <td>Bond Status BB/FML</td> <td>SR</td> <td>7/26/2000</td> </tr> <tr> <td>Log Records</td> <td>SR</td> <td>7/31/2000</td> <td>EDP</td> <td>SR</td> <td>7/27/2000</td> </tr> <tr> <td>Production Repts</td> <td>N/A</td> <td></td> <td>Data Base</td> <td>SR</td> <td>7/27/2000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Form or Record	Initials	Date	Form or Record	Initials	Date	Form OGD121	N/A		Map and Book			Operator Card			Notice cancellations	N/A		Well Records	SR	7/27/2000	Bond Status BB/FML	SR	7/26/2000	Log Records	SR	7/31/2000	EDP	SR	7/27/2000	Production Repts	N/A		Data Base	SR	7/27/2000						
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WELL TRANSFER NOTICE

EFFEC MAY 9, 1994, PETRO RESOURCES, INC.

TRANS LONG BEACH NWLBU WELLS

TO PACIFIC ENERGY ~~CORP~~ *Resources*

SEE OGD156 DATED 5-13-94

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1	
Former owner Sun Exploration & Production Co.		Date June 15, 1983	
Name and location of well(s) Sec. 13-4S-13W S.B.B.&M. NWLBU 5-1 (037-09795) NWLBU 8-1 (037-09792) NWLBU 9-3 (037-09791) NWLBU 5-2 (037-00397) NWLBU 8-2 (037-09793) NWLBU 9-4 (037-00392) NWLBU 5-3 (037-09796) NWLBU 8-3 (037-06496) NWLBU 9-5 (037-00142) NWLBU 5-4 (037-09797) NWLBU 8-4 (037-06415) NWLBU 9-6 (037-00393) NWLBU 6-1 (037-09788) NWLBU 8-7 (037-22512) NWLBU 6-2 (037-09789) NWLBU 9-2 (037-13525)			
Description of the land upon which the well(s) is (are) located			
Date of transfer, sale, assignment, conveyance, or exchange May 1, 1983	New owner Petro Resources, Inc. Address 4200 Easton Drive, Suite 16 Bakersfield, CA 94309	Type of organization Corp. Telephone No. 805/323-4118	
Reported by Letter from Sun Exploration & Production Co. dated 5-16-83.			
Confirmed by Letter from Petro Resources, Inc., dated 5-18-83.			
New operator new status (status abbreviation) PA	Request designation of agent Joe D. Rose, same address.		
Old operator new status (status abbreviation) PA	Remarks		
Deputy Supervisor V. F. Gaede		Signature <i>Richard L. Manuel</i>	

OPERATOR STATUS ABBREVIATIONS

PA - Producing Active

NPA - No Potential, Active

PI - Potential Inactive

NPI - No Potential, Inactive

Ab - Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121	CP	7-7-83	Map and book	137	7/12/83
Form OGD140	NONE		Notice to be cancelled		
New well cards	CP	7-7-83	Bond status		
Well records	CP	7-7-83	EDP files		
Electric logs	CP	7-7-83	Update		
Production reports			Conservation Committee		
			L. A. Assessors		

Name change from Sun Oil Co. to SUN EXPLORATION & PRODUCTION CO.

1-1-82, Form 156 dated 1-21-82. See ownership file.

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Long Beach, California

Oct. 4, 1979

Mr. L. B. Carroll, Jr., Agent
Sun Oil Co.
23928 Lyons Ave.
Newhall, CA 91321

DEAR SIR:

Your request dated March 19, 1979, relative to change in designation of well(s) in Sec. 13, T. 4S, R. 13W, S.B.B. & M., Long Beach field, Los Angeles County, District No. 1, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

“ * * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor.”

the proposed change in designation is hereby authorized as follows:

Old Designation	API	New Designation
"Oil Operators" 1 (see)	037-09792	NWLBU 8-1
" " 2	037-09793	NWLBU 8-2
" " 3	037-06496	NWLBU 8-3
" " 4	037-06415	NWLBU 8-4
"Pool" 1	037-09795	NWLBU 5-1
" " 2	037-00397	NWLBU 5-2
" " 3	037-09796	NWLBU 5-3
" " 4	037-09797	NWLBU 5-4
"Amebco" 1	037-09788	NWLBU 6-1
" " 2	037-09789	NWLBU 6-2
"Flood Control" 2	037-13525	NWLBU 9-2
" " 3	037-09791	NWLBU 9-3
" " 4	037-00392	NWLBU 9-4
" " 5	037-00142	NWLBU 9-5
" " 6	037-00393	NWLBU 9-6

*Mag. 137
+ Book
pnc 11/2/79*

RWS:sc

M. G. Mefferd
JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

cc: Update Center
EDP
Conservation Committee

By Richard W. Stahl
Acting Deputy Supervisor
R. A. Ybarra

REPORT OF PROPERTY AND WELL TRANSFER

QGD15h (12-77 CSEI-JV)

WORK PERFORMED:

Drill _____ Redrill ☒ Deepen _____
 Plug _____ Alter casing _____
 Water flood _____ Water disposal _____
 Abandon _____
 Other _____

STATUS:

(Date)

Producing _____
 Recomp. prod. ☒ 6-24-67
 Water flood _____
 Water disposal _____
 Abandoned _____
 Other _____
 MAP AND BOOK NC

RECORDS FILED & DATE: Clerk me

Summary (dup.) _____

Log & Core (dup.) _____

☒ History (dup.) 10/4/67☒ E-log (2) 3/63-5902 7/7/67

Radio log _____

D. Survey _____

Other _____

(Check records for signature
and correct name of operator
or well, S.T.R. and field.)

Location _____ Notice states _____

Elevation _____ Notice states _____

Production Reports _____

(If production reports not
received, make notation and
inform Sr. Steno. when rec'd.)

If stimulation or disposal well:
Form 121 _____ Folder _____

Form 19-A

RECORDS & REQUIREMENTS CHECKED: Eng. WJR

Surface inspection _____

Data needed none

Request records _____

Correct records _____
(Specify)

CARDS NCBOND: #1410633 dated 6-1-67

Hold _____ Reason _____

Release ☒ Date elig. 10-4-67

End premium year _____

5/14/68 Release requested ☒ (Check one)

Bond superseded _____

Well abandoned _____

FINAL LETTER _____

and

FILE CLEARED _____

Clerk:

F 170 _____

F 165 _____

165A _____

F 150b

Use

(Season 2

on Form

150b)

F 159 _____

F 121 _____

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of California

Well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B. B. & M.

Date September 11,, 19 67 Signed R. S. Ballantyne, Jr.

417 S. Hill St., Los Angeles 628-2156 Title Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

1967

8/8

8/9

Flowed 50 bbl. net 26.2° oil, 0.2% cut, 40-55#/pkr.
Moved in Blackwell & Sunde production rig. Opened bypass on packer and filled hole with salt water. Pulled tubing and packer (laid down 53 joints of 2-7/8" tubing). Go-Western jet perforated four 1/2" holes per foot as follows: 4612-4560', 4489-4449' and 4435-4395'.

8/10

Ran 127 joints of 2-7/8" Armco seal lock tubing with pump shoe and gas anchor - 3960' and 3990', respectively. Ran rods and put well on pump. (Production not separated from other wells until 9/5).

8/12

45 bbl. net.

8/14

50 bbl. net.

9/5

36 bbl. net, 24.1°, 0.5%.

9/12

32 bbl. net, 24°, 0.5%.

9/13

Moved in Blackwell & Sunde production rig. Ran 100 bbl. salt water into annulus. Installed BOPE. Pulled rods and tubing. Go Western found sticky bottom at 5845' and jet perforated four 1/2" holes per foot from 4805-4760'. Ran 139 joints of Armco 2-7/8" seal lock tubing with pump shoe and gas anchor at 4335' and 4365', respectively. Put well on pump.

9/14

56 bbl. gross, 38 bbl. net, 32.2%.

9/17

53 bbl. gross, 47 bbl. net, 11.3%.

9/26

67 bbl. gross, 66 bbl. net, 1.5%, 24.7°.

CASING RECORD AT COMPLETION OF WORK:

(Depths from present KB of 60') T.D. 5925'.

13-3/8" C 763'

8-5/8" C 3163'

5-1/2" C 5924, top 3017' (splice OK). Perfs. 4375' (WSO), 4395-4435', 4449-4489', 4560-4612', 4760-4805', 5712-5730', 5734-5754', 5761-5776'. Plug 5878'.

Sidetracked:

8-5/8" C 4011', top 3194'. Plug 3194' (and open hole up to 3165')

4-3/4" C 5382', top 3810'. Plug 3810'. Perfs: 4494-4534', 4571-4597',

4636-4676', 4811-4841', 4856-4926', 5119-5164', 5174-5241', 5286-5356'.

(6-5/8" L 4414' incl. 60' pfs, C 4350, top 3849', Perfs 4011-4034', 4076-4136', Reperf 4354-4405', cemented off behind 4-3/4".)

4-3/4" & 6-5/8" Perf 4146-4231'

**DIVISION OF OIL AND GAS
RECEIVED**

OCT 4 1967

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

JUL 7 1967

History of Oil or Gas Well

INGLEWOOD, CALIFORNIA

OPERATOR General Exploration Company of Calif. FIELD Long BeachWell No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B.B. & M.Date July 3,, 19 67

Signed

R. S. Ballantyne, Jr.417 S. Hill St., Los Angeles628-2156Title Vice President

(Address)

(Telephone Number)

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date	Notes
1967	Note: Depth measurements taken from present K.B. elevation of 60' which is 6' higher than original datum. Ground elevation is 48'.
6/6-7	Moved in, rigged up drilling equipment, installed base flange and B.O.P.E. (Graham Drilling Company).
6/8	Ran 7-5/8" bit on 3-1/2" drill pipe, located top of 4-3/4" liner at 3804' and filled hole with mud. Ran 940' stinger of 2-3/8" tubing on drill pipe and circulated from 4550' to solid fill at 4650'. Laid 100-sack class G cement plug from 4634'. Ran 7-5/8" bit and found cement at 3696' (witnessed by D.O.G.). Tested 8-5/8" casing and B.O.P.E. satisfactorily at 1050# for 15 minutes.
6/9-10	Ran two Yann mills and cut section in 8-5/8" casing from 3163' to 3168'. Ran two Servco mills and cut section to 3194'. Opened interval 3163'-3194' to 12-3/4". Ran 310' stinger of 2-7/8" tubing on drill pipe to 3260' and laid 80 sacks of class G cement (including 20% sand) treated with 0.5% CFR-2. Pulled tubing to 2720', back-scuttled, squeezed cement with 1100# and pressure dropping to 950# in 5 minutes.
6/11	Ran 7-5/8" bit and 8-5/8" casing scraper, found cement at 2992' and drilled out to 3165'. Drilled 7-5/8" hole to 3296' with DynaDrill.
6/12-16	Drilled 7-5/8" hole to 4845' using a Dyna Drill from 4299'-4463'. Ran Schlumberger I.E.S. from 4844' to 3163'.
6/16-19	Drilled 7-5/8" hole to 5900'. Ran Schlumberger I.E.S. from 5900' to 4844' and C.D.M. from 5900' to 4000'.
6/20	Drilled 7-5/8" hole to 5925' (T.D.). Ran 2907' (including Burns liner hanger), 68 joints, 5-1/2", 15.5#, J-55 casing on drill pipe. Cemented at 5924' with 579 C.F. of 1:1 class G cement pozmix with 2% gel and 0.5% CFR-2 and 12% salt in mix water. Backscuttled small amount of cement from inside top of 5-1/2" liner. Ran 7-5/8" bit and 8-5/8" casing scraper to top of liner at 3017'.
6/21	Pressure tested casing at 1000# and lap took fluid. Ran Baker shoe squeeze tool on drill pipe and set at 2925'. Squeezed 52 sacks of 75 sacks class G cement mixed into lap at 3017' with a final pressure of 2000#. Ran 7-5/8" bit and 8-5/8" casing scraper, found top of cement at 2940' and drilled out to 3017'.
6/22	Ran 4-3/4" bit and 5-1/2" casing scraper on 2949' of 2-7/8" Armco (seal lok) tubing below drill pipe. Cleaned out cement to 3037' and ran to float collar at 5878'. Satisfactorily pressure tested lap with 1000#. Ran Johnston tester and set packer at 2992' with tail to 3008'. Open 63 minutes. Recovered 10' of drilling fluid. Charts showed tester open. W.S.O. on lap approved by D.O.G. Ran Go-Western cement bond log from 5878' to 3900' and perforated four 1/2" jet holes at 4375'. Ran Johnston tester and set packer at 4342' with tail to 4358'. Open 1 hour. Recovered 45' of drilling fluid. Charts showed tester open. W.S.O. at 4375' approved by D.O.G.
6/23	Ran open end tubing to 5874'. Changed over to 68# salt water. Laid down drill pipe. Ran Go-Western 4" steel carrier and jet perforated four 1/2" holes per foot as follows: 5776'-5761', 5754'-5734' and 5730'-5712'. Ran Guiberson packer on 179 joints of 2-7/8" Armco (seal lok) tubing and set at 5615'. Landed tubing with 16,000# on packer.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS Page 2

History of Oil or Gas Well

OPERATOR General Exploration Company of Calif. FIELD Long BeachWell No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B.B. & M.Date July 3, 19 67Signed R. S. Ballantyne, Jr.417 S. Hill St., Los Angeles628-2156Title Vice Resident

(Address)

(Telephone Number)

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

6/24 Removed B.O.P.E. Installed surface equipment. Swabbed well into production at 10:00 A.M. Flowed 74 bbl. net/20 hrs., 81 BD rate, 27.2°, 0.1%, 65 McfD, 20-230#/pkr. 22/64" bean.

6/25 80 bbl. net, 27.2°, 0.1%, 65 Mcf, 20-160#/pkr., 22/64".

6/26 82 bbl. net, 27.2°, 0.1%, 58 Mcf, 20-150#/pkr., 22/64".

6/27 80 bbl. net, 27.2%, 0.2%, 63 Mcf, 20-170# pkr., 22/64".

CASING RECORD AT COMPLETION OF WORK:

(Depths from present KB of 60') T.D. 5925'.

13-3/8" C 763'

8-5/8" C 3163'

5-1/2" C 5924, top 3017' (splice OK). Perfs. 4375' (W80), 5712-5730', 5734-5754', 5761-5776'. Plug 5878'.

Sidetracked:

8-5/8" C 4011', top 3194'. Plug 3194' (and open hole up to 3165')

4-3/4" C 5382', top 3810'. Plug 3810'. Perfs: 4494-4534', 4571-4597', 4636-4676', 4811-4841', 4856-4926', 5119-5164', 5174-5241', 5286-5356'.

(6-5/8" L 4414' incl. 60' pfs, C 4350, top 3849', Perfs 4011-4034', 4076-4136', Reperf 4354-4405', cemented off behind 4-3/4".)

4-3/4" @ 6-5/8" Perf 4146-4231'.

DIVISION OF OIL AND GAS
RECEIVED

JUL 7 1967

INGLEWOOD, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T 167-576

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
June 28, 1967

DEAR SIR: (037-06415)

Your well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B. B & M.
Long Beach Field, in Los Angeles County, was tested for water shut-off
on June 22, 1967 Mr. R. Johnson, Engineer, designated by the supervisor was present
from 8:00 p.m. to 9:00 p.m. as prescribed by law; there were also present R. Willis, Engineer

Shut-off data: 5 1/2 in. 15.5 lb. casing was -- cemented from 3017' to xx 5925 ft.
on June 20, 1967 in 7-5/8 in. hole with 579 cu. ft. ~~xx~~ of cement
slurry (1:1 pozzmix, 2% gel)

filling calculated to behind casing to 3017 ft. below surface.
Casing record of well: 18-5/8" cem. 50'; 13-3/8" cem. 757'; 8-5/8" cem. 4005', window
3163'-3194' sidetracked @ 3165'; 5-1/2" cem. 3017'-5925', perf. 4358' WSO, TD 1st
hole 5379'.

Present depth 5925 ft. cmt. bridge 5925 ft. to 5880 ft. Cleaned out cmt. ---- ft. to ---- ft. for test.
A Johnston tester was run into the hole on 3 1/2 & 2-7/8 in. drill pipe ~~xxxx~~
with ----- ft. of water-mud cushion, and packer -- set at 4342 ft. with tailpiece to 4358 ft.
Tester valve, with 3/4 in. bean, was open for 1 hr. and --- min. During this interval there was a
light blow for 2 minutes & no blow thereafter.

Mr. Willis reported ~~x~~ that the 5-1/2" casing was jet-perforated
with four, 3/8" holes at 4358'.

THE ENGINEER NOTED:

1. When the drill pipe was removed, 45' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

THE 5-1/2" SHUT-OFF AT 4358' IS APPROVED.

RJ:nw

cc Company

E. R. MURRAY-AARON

State Oil and Gas Supervisor

By

Wm. C. Bailey Deputy

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 167-575

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
June 28, 1967

DEAR SIR:

(037-06415)

Operations at well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.E. B & M.
Long Beach Field, in Los Angeles County, were witnessed
on June 22, 1967. Mr. S. Cordova, Engineer, representative of the supervisor was present
from 11:30 a.m. to 12:15 p.m. There were also present R. Willis, Engineer &
C. D. Martin, Drilling Foreman

Present condition of well: 18-5/8" cem. 50'; 13-3/8" cem. 757'; 8-5/8" cem. 4005' window
3163'-3194', sidetracked @ 3165'; 5-1/2" cem. 3017'-5925'. TD 5925'. TD 1st hole 5379'.

The operations were performed for the purpose of demonstrating the effectiveness of the seal
between the 8-5/8" and 5-1/2" casings.

Mr. Willis reported:

1. A window was milled in the 8-5/8" casing from 3163' to 3194' and the hole was opened to 13" in that interval.
2. On June 10, 1967, 80 sacks of cement mixed with 20% sand was pumped into the hole through 3-1/2" drill pipe hanging at 3260'.
3. Cement was drilled out of the hole from 2992' to 3165'.
4. A 7-5/8" hole was redrilled from 3165' to 5925'.
5. On June 20, 1967, 2908' of 5-1/2", 15.5 lb. casing was cemented from 3017' to 5925' with 579 cubic feet of cement slurry (1:1 pozzmix, 2% gel), filling behind the 5-1/2" casing to 3017'.
6. Excess cement was backscuttled from above the 5-1/2" casing.
7. On June 21, 1967, the annulus between the 8-5/8" and 5-1/2" casings was recemented with 75 sacks of cement of which 50 sacks was squeezed away under a final pressure of 2000 Psi.
8. The hole was cleaned out to the float collar at 5880'.
9. A Johnston tester was run into the hole on 3-1/2" drill pipe, and packer set at 2993', with tailpiece to 3008'.
10. The tester valve with 3/4" bean was open for 1 hr. During this interval there was a light blow for 3 minutes and no blow thereafter.

THE ENGINEER NOTED:

1. When the drill pipe was removed, 10' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

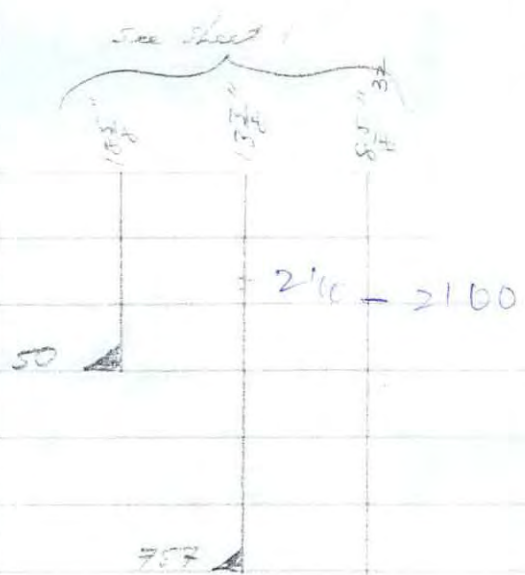
THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED and indicate that no fluid has access to the well from the annulus between the 8-5/8" and 5-1/2" casings.

SC:nw

cc Company

E. R. MURRAY-AARON
State Oil and Gas Supervisor

By W. C. Bailey Deputy



5 1/2" 15.5" 2100'

BFW 2250'
 upper CUB (A) 2475'
 (C) upper WILBUR 3880'
 ALAMITOS Lower 3882'
 BROWN 4400'

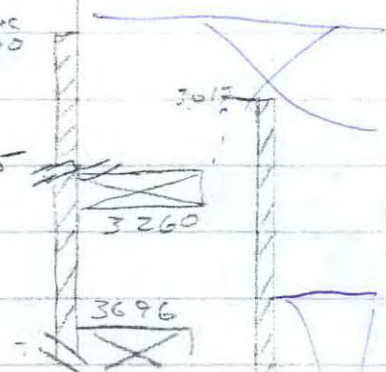
PETES 2445-45 2150'
 (3) = W - 2250
 W42 - 2475

plug fr. 5878 - 2817

S.T. @ 3165

CEM @ 3260, 80 ft
 drilled out to 3165 for S.T.

NEED 2817
 3017 T.O.L. 3017 (6/20/67)



3480'

ALAM. 3882

W50 @ 4353

BROWN 4400

WHS: 5712 - 5776 6/23/67

6/20/67 CEM 5794 5925



Flow collar plug @ 5878 6/22/67

Ref in

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 167-526

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013

Inglewood, Calif.
June 14, 1967

Agent for GENERAL EXPLORATION CO. OF CALIF.

DEAR SIR: (037-06415)

Operations at well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B. B & M.
Long Beach Field, in Los Angeles County, were witnessed
on June 8, 1967. Mr. M. Mefferd, Engineer, representative of the supervisor was present
from 9:30 p.m. to 10:30 p.m.. There were also present C. Martin, Drilling Foreman &
L. Saxton, Driller

Present condition of well: 18-5/8" cem. 50'; 13-3/8" cem. 757'; 8-5/8" cem. 4005', WSO;
6-5/8" ld. 3843'-4408', cp 4344', perf. 4005'-4028', 4070'-4130' & 4140'-4225';
4-3/4" cem. 3804'-5376', perfs. 4140'-4225', 4488'-4528', 4565'-4591', 4630'-4670',
4805'-4835', 4850'-4920', 5113'-5158', 5168'-5235' & 5280'-5350'. TD 5379', plugged
w/cem. 5376'-5361' & 4634'-3696'.

The operations were performed for the purpose of testing the location and hardness of a cement
plug placed from 4634' to 3696' in the process of plugging back to redrill.

Mr. Martin reported:

1. The hole was cleaned out to solid fill at 4650'.
2. On June 8, 1967, 100 sacks of cement was pumped into the hole through 2-3/8" tubing hanging at 4634', filling to 3696'.

THE ENGINEER NOTED THAT the cement plug at the reported depth of 3696' supported 1/4 of the weight of the drill pipe.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 3696' ARE APPROVED.

MM:nw

cc Company

E. R. MURRAY-AARON

State Oil and Gas Supervisor

By

Deputy

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 167-601

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
 Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
June 6, 1967

DEAR SIR:

(037-06415)

Your proposal to redrill Well No. "Oil Operators" 4,
 Section 13, T. 4 S, R. 13 W, S.B. B. & M., Long Beach Field, Los Angeles County,
 dated June 2, 1967, received June 2, 1967, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.
 Plugged w/cem. 5376'-5361'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 5379'
2. Complete casing record, including plugs:
 13-3/8" C 757'
 8-5/8" C 4005' OK
 4-3/4" C 5376', top 3804', Pfs. 4488-4528', 4565-4591', 4630-4670', 4805-4835',
 4850-4920', 5113-5158', 5168-5235' and 5280-5350'.
 Pl. 5365'. Sand bridge 4650'.
 (6-5/8" L 4408' incl. 60' pfs. C 4344', top 3843', Pf 4005-4028', 4070-4130';
 Repf 4348-4399', cemented off behind 4-3/4".)
 4-3/4" & 6-5/8" PF 4140-4225'.
3. Last produced

10/14/64	2	546	-
(Date)	(Oil, B/D)	(Water, B/D)	(Gas) "

PROPOSAL

"The proposed work is as follows:

1. Move in drilling equipment, install B.O.P.E. and fill hole with mud.
2. Lay cement plug from top of sand at approximately 4650' back to 3700'
 (top 4-3/4" liner at 3804'). Lock top of plug. Pressure test 8-5/8" casing
 and B.O.P.E. with 1000#.
3. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 13",
 lay cement plug from 100' below section back above top of window and level off
 plug 5' into section.
4. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 4800'.
5. Run and cement 5-1/2" liner, effect W.S.O. at lap of 8-5/8" casing and above pro-
 ductive horizon.
6. Complete well."

DECISION

THE PROPOSAL IS APPROVED PROVIDED:

1. Fluid consistent with good drilling practice shall be used, and the column of fluid
 maintained at all times to the surface, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be installed and maintained in operating
 condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
 - a. The location and hardness of the cement plug at 3700'.
 - b. A test, after cleaning out below the top of the liner to demonstrate that no fluid
 has access to the well from the annulus between the 8-5/8" and 5-1/2"
 casings.

E. R. MURRAY-AARON, State Oil and Gas Supervisor

[Signature]

Deputy Dated

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

JUN 2 1967

INGLEWOOD, CALIFORNIA

Los Angeles Calif. June 2 1967

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to

commence the work of ~~deepening, redrilling, plugging or altering casing~~ at Well No. "Oil Operators" 4
(Cross out unnecessary words)

, Sec. 13, T. 4S, R. 13W, S.B. & M.

Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 5379'

2. Complete casing record, including plugs:

13-3/8" C 757'

8-5/8" C 4005' OK

4-3/4" C 5376', top 3804', Pfs. 4488-4528', 4565-4591', 4630-4670',
4805-4835', 4850-4920', 5113-5158', 5168-5235' and 5280-5350'.
Pl. 5365'. Sand bridge 4650'.(6-5/8" L 4408' incl. 60' pfs. C 4344', top 3843', Pf 4005-4028', 4070-4130';
Repf 4348-4399', cemented off behind 4-3/4".)

4-3/4" & 6-5/8" Pf 4140-4225'.

3. Last produced. 10/14/64 2 546 -
(Date) (Oil, B/D) (Water, B/D) (Gas)

The proposed work is as follows:

1. Move in drilling equipment, install B.O.P.E. and fill hole with mud.
2. Lay cement plug from top of sand at approximately 4650' back to 3700' (top 4-3/4" liner at 3804'). Locate top of plug. Pressure test 8-5/8" casing and B.O.P.E. with 1000#.
3. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 13", lay cement plug from 100' below section back above top of window and level off plug 5' into section.
4. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 4800'.
5. Run and cement 5-1/2" liner, effect W.S.O. at lap of 8-5/8" casing and above productive horizon.
6. Complete well.

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			No. 1410633 6-1-67	as	as

417 S. Hill St., Los Angeles 90013

(Address)

628-2156

(Telephone No.)

GENERAL EXPLORATION COMPANY OF CALIFORNIA

(Name of Operator)

By R. S. Ballantyne
R. S. Ballantyne, Vice President

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or County **Long Beach** District **1**
Former Owner: **Union Oil Co. of California** Date **January 17, 1961**
Description of Property **Sec. 13, T. 4 S., R. 13 W., S. 2. S. & 11.**

List of Wells **"Oil Operators" 1, "Oil Operators" 2, "Oil Operators" 3 and "Oil Operators" 4. ("Oil Operators" 1, 1916; other wells are active)**

Date of Transfer **January 1, 1961**
New Owner: **General Exploration Co. of California**
Address: **730 Subway Terminal Building, 417 South Hill Street, Los Angeles 13, Calif.**

Telephone No.

Type of Organization **Corporation**
Reported by: **Union Oil Co. of California (letter of January 6, 1961)**
Confirmed by: **General Exploration Co. of California (letter of January 11, 1961)**
New Operator New Status **PA**, Old Operator New Status **PA**
Request designation of agent **Lo**

Remarks:

cb

CC- **Mr. D. H. Nasser**
Fred. Dept.
Conservation Committee

	INITIALS	DATE
Form 121		
New Well Cards		
Well Records		
Electric Logs		
Production Reports		
Map and Book		
Form 148		
Notice to be cancelled		


Deputy Supervisor

LEGEND
PA—Producing Active
NPA—Non Potential Active
PI—Potential Inactive
NPI—Non Potential Inactive
Ab—Abandoned or No More Wells
NOTE—If Transfer Does Not Change Overall Status Enter "No Change"

Form 10

CLERK

: 13

RECEIPT FOR

Date Received 11-6-59 Form 100 101 103 New Well RecordsElec. Log Radio Log Subsequent WorkDirect. Surv. Other Data None Well Summary Location (100) Drillers Log (101) Elevation Clerk Scott Core Record Prod. Repts. Clerk History COMPLETED PRODUCING ON 8-27-59
ENGINEERABANDONED ON Elec. Log BOND Blanket Release Date Elig. 150b Other End Prem. year Release Requested Superseded Aband. Redrill HOLD BOND Reason Deepen Plug Data Needed Alter Csg. Final Letter Eng. RC Abandon

NOV 6 1959
CASING RECORDDIVISION OF OIL AND GAS
UNION OIL COMPANYHistory of Oil or Gas Well
REPAIR REPORT

INGLEWOOD, CALIFORNIA

See below

Portable Hoist-Contract
(TOOLS)August 27, 1959
(PERIOD ENDING)

(NOTE INEFFECTIVE CASING)

WELL NO. "Oil Operators" #4
Long beach
(FIELD)
Los Angeles
(COUNTY)
SEC. 13, T. 4-S, R. 13-W S.B. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1959			
				CHARGE: HR-AFE 56900 Job 528. PROPOSED WORK: Add perforations in the Alamitos Zone. PRODUCTION BEFORE REPAIR: Idle ZERO POINT for this Job: 8.5' above pad.
				CASING RECORD AT START OF WORK: 13-3/8" C 757' 8-5/8" C 4005' OK 1572' 4-3/4" C 5376'. Pfs 4488-4528', 4565-4591', 4630-4670', 4805-4835', 4850-4920', 5113-5158', 5168-5235', 5280-5350'. (565' 6-5/8" L 4408' incl. 60' pfs. Gr 4344'. Pf 4005-4028', 4070-4130'; Repf 4348-4399', cemented off behind 43")
				CASING RECORD AT COMPLETION OF WORK: 13-3/8" C 757' : 8-5/8" C 4005' OK 1572' 4-3/4" C 5376'. Pfs 4488-4528', 4565-4591', 4630-4670', 4805-4835', 4850-4920', 5113-5158', 5168-5235', 5280-5350'. (565' 6-5/8" L 4408' incl. 60' pfs. Gr 4344'. Pf 4005-4028', 4070-4130'; Repf 4348-4399', cemented off behind 43") 4-3/4" & 6-5/8" perms., 4140-4225'.
2	8-25	5379	Plug 5361	Contractor moved in and rigged up. Pulled rods and pump. Pulled tubing. Ran in with 7-1/2" impression block to top of 4-3/4" liner at 3807'. Ran 3-5/8" impression block to 4250'. Installed blow-out preventer.
2	8-26	"	"	Perforated 4-3/4" and 6-5/8" liners from 4225-4140' with two 1/2" jet holes per foot and two 1/2" bullets per foot. Fluid level (mud) rose from 3600' at start to 1400' at end. Light blow while shooting. Ran in with 2-7/8" Cavins sand pump and bailed at 5331'. Started running tubing.
2	8-27	"	"	Ran in and landed tubing with gas anchor at 4200'. Ran rods and pump. Put well on production. Contractor moved out.

NAMES OF DRILLERS/HEAD WELL PULLERS:
Terminal Drilling Co. - ContractorVaughn S. Meyer
DISTRICT ENGINEER

DIVISION OF OIL AND GAS

UNION OIL COMPANY

CASING RECORD

Oil Operators #4
WELL NO. _____
Long Beach
(FIELD)
Los Angeles
(COUNTY)
SEC. 13 T. 4-S R. 13-W S.B. B. & M.

History of Oil or Gas Well
REPAIR REPORT

Port. Moist - Contract

(TOOLS)

September 24, 1959

(PERIOD ENDING)

13-3/8" C 757'; 8-5/8" C 4005' ON
1572' 4 1/2" C 5376'. Lf 4488-4528
4565-4591', 4630-4670, 4805-4825
4850-4920, 5113-5158, 5168-5235'
5280-5350'
(565' 6-5/8" L 4408' incl. 60' pfs
(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1959	5379	Plug 5361	CF 4344'. LF 4005-4028, 4070-4130'; repfs 4348-4399', contd off behind 4-3/4" 4-3/4" & 6-5/8" pfs 4140-4225'.
PRODUCTION DATA				
	</			

DIVISION OF OIL AND GAS
RECEIVED

NOV 6 1959

INGLEWOOD, CALIFORNIA

Pulled rods.
Pulled tubing. Ran tbg & rods.
Pump stuck.

rjh

NAMES OF DRILLERS/HEAD WELL PULLERS:
Terminal Drilling Co. - ContractorVaughn S. Meyer
DISTRICT ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONSNo. P. 159-744Mr. C. F. Bowden
P. O. Box 7600
Los Angeles 54, California
Agent for UNION OIL COMPANY OF CALIFORNIAInglewood 3, Calif.
September 1, 1959

DEAR SIR:

Your proposal to alter casing Well No. "Oil Operators" 4,
Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
dated August 25, 1959 received August 28, 1959 has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.

18-5/8" cem. 50'; 8-5/8" cem. 4005', W.S.O.; 6-5/8" perf. 4348'-4408', plugged with cement 5376'-5361'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 5379'
Plug 5361'
2. Complete casing record.
13-3/8" C 757'
8-5/8" C 4005' OK
565' 6-5/8" L 4408' inc. 60' perf.; CP 4344'; Pf. 4005-4028, 4070-4130,
4348-4399'-----Cemented off behind 4-3/4".
1572' 4-3/4" C 5376', plug 5361'; Pf 4488-4525, 4565-4591, 4630-4670,
4805-4835, 4830-4920, 5113-5235, 5280-5350'.
3. Last produced. January, 1958 2 21.1 75.0%
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL

"The proposed work is as follows:

1. Pull rods and tubing. Install blow-out preventer equipment.
2. Check condition of casing.
3. Bullet and jet perforate 4-3/4" and 6-5/8" casings with four holes per foot from 4140-4225'.
4. Run tubing, pump and rods.
5. Test well on production."

DECISION

THE PROPOSAL IS APPROVED.

RC:yk

cc- Mr. Vaughn S. Moyer

E. H. MUSSER, State Oil and Gas Supervisor

Blanket Bond

By E. C. Baird, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 25 1959
INGLEWOOD, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Santa Fe Springs

Calif.

August 25,

19 59

DIVISION OF OIL AND GAS

Inglewood

Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-WS.B.

B. & M.

Long BeachField, Los Angeles

County.

The present condition of the well is as follows:

1. Total depth. 5379'Plug 5361'

2. Complete casing record.

13-3/8" C 757'8-5/8" C 4005' OK565' 6-5/8" L 4408' inc. 60' perf.; CP 4344'; Pf. 4005-4028, 4070-4130, 4348-4399' ---- Cemented off behind 4-3/4".1572' 4-3/4" C 5376', plug 5361'; Pf 4488-4525, 4565-4591, 4630-4670, 4805-4835, 4830-4920, 5113-5235, 5280-5350'.

3. Last produced.

January, 1958221.175.0%

(Date)

(Net Oil)

(Gravity)

(Cut)

The proposed work is as follows:

1. Pull rods and tubing. Install blow-out preventer equipment.
2. Check condition of casing.
3. Bullet and jet perforate 4-3/4" and 6-5/8" casings with four holes per foot from 4140-4225'.
4. Run tubing, pump and rods.
5. Test well on production.

MAP	MAP BOOK	CARDS	BOND	FORMS
				114 121
			Blanket	EB EB

Union Oil Co. of Calif.

(Name of Operator)

By

Vaughn S. Moyer, Division Engr.

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

COMPLETED PRODUCING ON 8-27-59

ABANDONED ON

STENOGRAPHER

Date Received 2-26-49 Form 100 101 103Elec. Log Radio Log Direct. Surv. Other Data History matterLocation
CasingElevation Steno. 80

ENGINEER

BOND Blanket Release Date Elig. 150b End Prem.Yr. Release Requested Superseded Aban. HOLD BOND Reason
Data Needed 1 Final Letter Eng. SMR3-1-49
Note: This work done without filing notice.

STENOGRAPHER

Date Received 12-2-48 Form 100 101 103 Elec. Log. Radio Log Direct. Surv. Other Data List of all casesLocation Elevation Steno. z

ENGINEER

BOND Blanket Release Date Elig. 150b End Prem. Yr. Release Requested Superseded Aban. HOLD BOND Reason Data Needed NoneFinal Letter Eng. SMR12-6-48

DIVISION OF OIL AND GAS

UNION OIL COMPANY

History of Oil or Gas Well

REPAIR REPORT

Portable Hoist - Contract

(TOOLS)

Oct. 30, 1948

(PERIOD ENDING)

13-3/8" O 75' CASING RECORD

8-5/8" O 4005' O.K.

1572' 4-3/4" O 5376', pf 4630-70'

4805-35', 4850-4920', 5113-58'

5165-5235', 5260-5350'

(565' 6-5/8" L 4408' inc. 60' pf,

O.P. 4344' behind 4-3/4")

(NOTE INEFFECTIVE CASING)

WELL NO. Oil Operators #4

Long Beach

(FIELD)

Los Angeles

(COUNTY)

SEC. 13, T. 4-S, R. 13-W S.B. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																																		
	1948			LOS ANGELES, CALIFORNIA																																																																		
				Proposed Work: Perforate interval from 4805' to 4835' with two $\frac{1}{2}$ " holes per foot.																																																																		
				Production: 7 B/D net - 18.7% - 21.5°																																																																		
1	10-18	5379	Plug 5361	California Production Service - Contractors, moved in and pulled rods, pump and tubing. Ran 2-7/8" Gavins sand pump bailer to 5350'.																																																																		
1	10-19	"	"	Cleaned out with ditto bailer to 5360'. Ran 3-3/4" impression block to 5130'. Indicated rough perforation holes. Ran 3-1/2" impression block to 5360'. O.K. Ran in and shot 4-3/4" casing at intervals from 4630-4670', 4805-4835' with 140 1/2" McCullough bullets, using 3-1/2" o.d. x 10' (20-shot) gun. Checked top of 4-3/4" casing at 3802'. Fluid level at start 3590'. Fluid level at finish 3520'. Evidence of fine sand and mud on guns and sand line during shooting from 4630-4670'. Light gas blow during entire period of shooting.																																																																		
1	10-20	"	"	Ran tubing to 4600'. Put well on production.																																																																		
				<u>PRODUCTION DATA</u>																																																																		
				<table><tr><th>Hours</th><th>Gross</th><th>Net</th><th>Cut</th><th>Grav.</th><th>Remarks</th></tr><tr><td>10-21</td><td>28</td><td>26</td><td>8.0</td><td>21.5</td><td></td></tr><tr><td>10-22</td><td>20</td><td>18</td><td>10.0</td><td></td><td></td></tr><tr><td>10-23</td><td>15</td><td>14</td><td>6.0</td><td></td><td></td></tr><tr><td>10-24</td><td>18</td><td>17</td><td>5.0</td><td></td><td></td></tr><tr><td>10-25</td><td>15</td><td>14</td><td>6.0</td><td></td><td></td></tr><tr><td>10-26</td><td>15</td><td>14</td><td>6.0</td><td></td><td></td></tr><tr><td>10-27</td><td>7</td><td>6</td><td>14.0</td><td></td><td></td></tr><tr><td>10-28</td><td>6</td><td>6</td><td>-</td><td></td><td></td></tr><tr><td>10-29</td><td>7</td><td>6</td><td>14.0</td><td></td><td></td></tr><tr><td>10-30</td><td>6</td><td>6</td><td>-</td><td></td><td></td></tr></table>	Hours	Gross	Net	Cut	Grav.	Remarks	10-21	28	26	8.0	21.5		10-22	20	18	10.0			10-23	15	14	6.0			10-24	18	17	5.0			10-25	15	14	6.0			10-26	15	14	6.0			10-27	7	6	14.0			10-28	6	6	-			10-29	7	6	14.0			10-30	6	6	-		
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MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121

NAMES OF DRILLERS/HEAD WELL PULLERS: Calif. Prod. Serv. - Contr.

John R. Innes

DISTRICT ENGINEER

DIVISION OF OIL AND GAS

UNION OIL COMPANY

History of Oil or Gas Well

REPAIR REPORT

Portable Hoist - Contract

(TOOLS)

Dec. 9, 1948

(PERIOD ENDING)

CASING RECORD

13-3/8" C 757'; 8-5/8" C 4005'
O.K.s: 1572' 4-3/4" C 5376', pf.
4488-4528', 4565-4591', 4630-4670
4805-4835', 4850-4920', 5113-58'
5168-5235, 5280-5350'; (565'
6-5/8" L 4408' inc. 60' pfs.,
C.P. 4344' behind 4-3/4")

(NOTE INEFFECTIVE CASING)

WELL NO. 011 Operator #4
Long Beach
(FIELD)
Los Angeles
(COUNTY)
SEC. 13 T. 4-S R. 13-W S.B. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																							
	<u>1948</u>																																																										
				Proposed Work: Perforate interval from 4565' to 4591' with two 1/2" holes per foot. Test on the pump. Productions 6 B/D net - 11.4% out																																																							
2	11-23	5379	Plug 5361	Pulled rods, pump and tubing. Made up 2-5/8" Carins sand pump bailer																																																							
2	11-24	5379	"	Checked bottom with bailer at 5360'. Gun perforated 4-3/4" casing from 4488-4528', 4565-4591' with 132' McCullough 1/2" bullets using 3-1/2" o.d. x 20 shot gun (120 grain loads). Had strong gas blow after shooting first gun. Blow continued throughout shooting. Unable to check fluid level with gun. Guns contained some sand. Casing pressure 225# while shooting. Used 8.5' above concrete pad as zero measurement.																																																							
3	11-25	5379	"	Checked bottom at 5360'. Unable to determine fluid level. Ran tubing, pump and rods. Contractors moved out.																																																							
1	11-26 to 11-29	5379	"	Installed gas trap																																																							
				PRODUCTION DATA																																																							
				<table><tr><th>Hours</th><th>Gross</th><th>Net</th><th>Out</th><th>Remarks</th></tr><tr><td>16</td><td>12</td><td>11</td><td>21.5</td><td></td></tr><tr><td>12-1</td><td>0</td><td>-</td><td>-</td><td>Pump change.</td></tr><tr><td>12-2</td><td>0</td><td>-</td><td>-</td><td></td></tr><tr><td>12-3</td><td>0</td><td>-</td><td>-</td><td>Bailed 5315-5360'</td></tr><tr><td>12-4</td><td>0</td><td>-</td><td>-</td><td>Bailing</td></tr><tr><td>12-5</td><td>0</td><td>-</td><td>-</td><td>Bailing</td></tr><tr><td>12-6</td><td>24</td><td>47</td><td>28</td><td>40.0</td></tr><tr><td>12-7</td><td>24</td><td>8</td><td>5</td><td>40.0</td></tr><tr><td>12-8</td><td>24</td><td>12</td><td>7</td><td>40.0</td></tr><tr><td>12-9</td><td>24</td><td>9</td><td>5</td><td>40.0</td></tr></table>	Hours	Gross	Net	Out	Remarks	16	12	11	21.5		12-1	0	-	-	Pump change.	12-2	0	-	-		12-3	0	-	-	Bailed 5315-5360'	12-4	0	-	-	Bailing	12-5	0	-	-	Bailing	12-6	24	47	28	40.0	12-7	24	8	5	40.0	12-8	24	12	7	40.0	12-9	24	9	5	40.0
Hours	Gross	Net	Out	Remarks																																																							
16	12	11	21.5																																																								
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12-4	0	-	-	Bailing																																																							
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12-8	24	12	7	40.0																																																							
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MAP	MAP BOOK	CARDS	BOND	FORMS																																																							
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RECEIVED
FEB 26 1949
LOS ANGELES, CALIFORNIA

NAMES OF DRILLERS/HEAD WELL PULLERS: CALIF. PROD. SERV. - Contr.

John R. Giraser
DISTRICT ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-45682

Los Angeles 15, Calif. October 5, 19 48

Mr. W. S. Eggleston

Los Angeles 14, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to alter casing Well No. "Oil Operators" 4, Section 13, T. 4 S., R. 13 W., S. B. B. & M., Long Beach Field, Los Angeles County, dated Sept. 30, 19 48, received Oct. 1, 19 48, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' - Plug 5365'

18-5/8" C 50'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408' inc. 60' perf., C.P. 4344' - drilled through bottom.

(Perf. & cmtd. 4005-4028', 4070-4130')

1572' 4-3/4" C 5376', perf. 4850-4920', 5113-5158', 5168-5235', 5282-5350'

2. Last produced	Aug. 1948	8 B/D Ave.	21.5°	15.5%
	(Date)	(Net Oil)	(Gravity)	(Cut)"

PROPOSAL:

"The proposed work is as follows:

1. Add perforations with two 1/2 bullet perforations per foot in the intervals from 4630-4672', 4805-4835'.
2. Test on production."

DECISION:

THE PROPOSAL IS APPROVED.

SHR:OH

cc- John R. Fraser
Long Beach

Records Filed	
100	
101	
103	12-2-48
E. Log.	

See also history of attempts.

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. Musser

Deputy

Blanket bond.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
OCT 1 - 1948
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Whittier, Calif. Sept. 30, 19 48

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S. B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' - Plug 5365'

18-5/8" C 50'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408' inc. 60' perf., C.P. 4344' - drilled through bottom.

(perf. & cmtd. 4005-4028', 4070-4130')

1572' 4-3/4" C 5376', perf. 4850-4920', 5113-5158', 5168-5235', 5282-5350'

2. Last produced Aug. 1948 8 B/D Ave. 21.5° 15.5%
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Add perforations with two 1/2" bullet perforations per foot in the intervals from 4630-4672', 4805-4835'.
2. Test on production.

alter casing

				FORMS	
MAP	MAP BOOK	CARDS	BOND	114	121
			<i>Blanket</i>	<i>pf</i>	<i>pf</i>

UNION OIL COMPANY OF CALIF.

(Name of Operator)

By

John R. Fraser
John R. Fraser, Division Engr.

Address Notice to Division of Oil and Gas in District Where Well is Located

STENOGRAPHER

Forms ed 103Date Rec'd. 11-14-45Electric Log Location Elevation

ENGINEER

Form Needed Map Correction Form 150b (Date of Release)At Request of Operator BlanketBecause Abandoned Because Request by Oper. Remarks sub work report ofalter casingERma

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
NOV 14 1945
LOS ANGELES, CALIFORNIA

OPERATOR Union Oil Company of California FIELD Long Beach

Well No. Oil Operators 4, Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

Signed Henry E. Winter

Date November 8, 1945 Title Division Engineer.
(President, Secretary or Agent)

Use this form in reporting all important operations at the well, together with the dates thereof, in the order of their performance. Such operations include drilling, redrilling, deepening, plugging, or altering casing as by perforating, shooting, or pulling. Include in your report size of hole drilled, redrilled, or deepened; size, weight and length of casing landed, cemented, or removed, amount and location of perforations; number of sacks of cement used in cementing or plugging operations, number of feet of cement drilled out of casing, location of top and bottom of cement plugs. If the well was dynamited, give date, dimensions and weight of all shots. If tests were made give interval tested and results of tests, such as, amount and nature of fluids recovered.

Date

Casing Record at Beginning of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
565' 6-5/8" L 4408', inc. 60' perf.
C.P. 4344' - Reperf. 4348-4399'
1572' 4-3/4" C 5376'
Perf. and reperf. 5113-5158, 5168-5235
and 5280-5350'

Casing Record at End of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
565' 6-5/8" L 4408', inc. 60' perf.
C.P. 4344' - Reperf. 4348-99
1572' 4-3/4" C 5376'
Perf. and reperf. 4850-4920,
5113-5158, 5168-5235 and 5280-5350'

Date	Depth	Eff. Depth	Remarks
1945			
8-16	5379	Plug 5361	Pulled rods and tubing. Rigged up to add perforations.
8-17		C.O. 5361	Cleaned out sand from 5355 to 5361'. Fluid level 4410'.
8-18			Perforated 4-3/4" casing from 4850 to 4920' with 138 Lane-Wells 1/2" bullets.
8-22			Ran rods and 2-1/2" upset tubing to 5029' over-all. Put well to pumping.

Production Data:

	Hours	Gross	Net	Grav.	Cut
8-23	24	21	16	26.2	13.1
8-25	24	21	16	26.2	13.1
8-27	24	19	16	26.2	13.1
8-29	24	21	18	26.2	13.1
8-31	24	17	15	26.2	13.1

MAP	MAP BOOK	CARDS	BOOKS	FORMS	
				114	121

DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

AT 732

Los Angeles
Union Oil Co. of Calif.

Calif.

19 ~~10-10~~ 44

Name of Operator

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13

T. 4S R. 13W, SB B. & M., as herewith enumerated by well numbers.

Logs

Long Beach

History

Core record

Subsequent work

- Oil operators - 4

RECEIVED
OCT 20 1944
SAN FRANCISCO, CALIF.

10-4-44

R. D. BUSH, State Oil and Gas Supervisor

FORM 127

36195 7-44 3500 TRIP SPO

By

E. S. Musser

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-41022

Los Angeles 14,

Calif.

August 14, 1945

Mr. W. S. Eggleston

Los Angeles 14,

Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to alter casing Well No. "Oil Operators" 4,
Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
dated Aug. 6, 1945, received Aug. 10, 1945, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

Records in addition to, or at variance with those shown in the notice:

The 6-5/8" casing is perforated 4348'-4408', 4130'-4070', and 4028'-4005',
(sealed off by 4-3/4" casing).

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' Plug 5361'

13-3/8" Cmtd. 757'

8-5/8" Cmtd. 4005' OK

1572' 4-3/4" Cmtd. 5376' Perf. 5113-5158', 5168-5235', 5280-5350'.

(565' 6-5/8" L 4408' inc. 60' perf. CP 4344' - Drilled through)

Production has not been satisfactory since reperforating in August, 1944.

2. Last produced <u>June, 1945</u>	<u>172</u>	<u>26.2°</u>	<u>26.2%</u>	<u>29 days</u>
(Date)	(Net Oil)	(Gravity)	(Cut)"	

PROPOSAL:

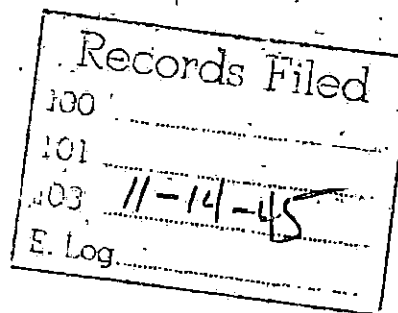
"The proposed work is as follows:

1. Leave present perforations (RS-T) open and add perforations 4850-4920'.
2. Test on production."

DECISION:

THE PROPOSAL IS APPROVED.

ERMA:OH



cc- P. A. W.
H. E. Winter
Long Beach

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. Meuser

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
AUG 10 1945
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs, Calif. August 6, 19 45

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' Plug 5361'
13-3/8" Cmtd. 757'
8-5/8" Cmtd. 4005' OK
1572' 4-3/4" Cmtd. 5376' Perf. 5113-5158', 5168-5235', 5280-5350'.
(565' 6-5/8" L 4408' inc. 60' perf. CP 4344' - Drilled through)

Production has not been satisfactory since reperforating in August, 1944.

2. Last produced June, 1945 172 26.2° 26.2% 29 days
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Leave present perforations (RS-T) open and add perforations 4850-4920'.
2. Test on production.

alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS
			Blanket 99071	114 121
				End End

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By

Henry E. Winter
Division Engineer

cc: P.A.W.

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STENOGRAPHER

Forms Filed 102

Date Rec'd. 10-4-44

Electric Log ✓

Location

Elevation ✓

ENGINEER

Form Needed none

Map Correction none

Form 150b (Date of Release)

At Request of Operator

Because Abandoned

Because Request by Oper.

Remarks Rec. for Subsequent

work report YCH

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

13
DIVISION OF OIL & GAS
RECEIVED

OCT 4 1944

LOS ANGELES, CALIFORNIA

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated July 18, 1941, was filed.

SIGNED _____

Henry E. Winter

Date September 27, 1944

Title Division Engineer

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

Casing Record at Beginning of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
1572' 4-3/4" C 5376' -
Perf. and Reperf. 5113-5158,
5168-5175' and 5280-5350'
(565' 6-5/8" L 4408', inc 60' Perf.
(Behind 4-3/4")
C.P. 4344' - Reperf. 4348-4399')

Casing Record at End of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
1572' 4-3/4" C 5376'
Perf. and Reperf. 5113-5158',
5168-5235' and 5280-5350'
(565' 6-5/8" L 4408', inc. 60'
Perf. (Behind 4-3/4")
C.P. 4344' - Reperf. 4348-4399')

1944	Depth	Effective Depth	Remarks
8-7	5379	Plug 5361	Moved in and rigged up to reperforate.
8-12	5379	C.O. 5360	Cleaned out sand from 5325 to 5360' with 2-7/8" bailer. Fluid level 3561'
8-14	5379		Perforated and reperforated 4-3/4" casing with 1/2" Lane-Wells gun holes as follows: 5350-5282' with 34 holes, 5235-5168' with 120 holes, and 5158-5113' with 21 holes.
8-22	5379	C.O. 5361	Checked top of oil at 3520'; top of water at 5325' and hole open to 5361'
8-25	5379		Ran rods and 2-1/2" plain and upset tubing to 5329' overall. Put well to pumping.

PRODUCTION DATA

Hours	Gross	Net	Gravity	Cut	Remarks	MAP	MAP BOOK	CARDS	BOND	FORMS
										114 121
8-27	24	1	1	26.2	4.4					
8-29	24	1	1	26.2	4.4					
8-31	0									
9-4	24	57	54	26.2	4.4					
9-9	8	12	10	26.2	16.0					
9-11	24	17	14	26.2	16.0					
9-13	24	15	9	26.2	20.0					
9-15	24	14	9	26.2	38.0					
9-17	24	14	9	26.2	38.0					

Changed pump

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-39835

Los Angeles 14. Calif. July 18, 19 44

Mr. W. S. Eggleston

Los Angeles 14. Calif.

121

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to plug & alter casing Well No. "Oil Operators" 4,
Section 13, T. 4 S., R. 13 W., S. E. B. & M., Long Beach Field, Los Angeles County,
dated July 15, 19 44, received July 17, 19 44, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.
Total depth 5379' - plug 5361'
13-3/8" cmtd. 757'
8-5/8" cmtd. 4005' O.K.
(565' 6-5/8" landed 4408', inc. 60' perf. C.P. 4344'. Perf. 4005-4028, 4070-4130' -
deepened through)
2. July, 1944 produced 87 26.2 40.0 - 29 days.
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL:

"The proposed work is as follows:

1. Add perforations 5175-5235' and re-perforate present perforations.
2. If wet or no fluid, plug to 5090' and test by Division of Oil and Gas.
3. Perforate 4850-4920' and test. If unsuccessful, test higher.
4. If any test is unsuccessful, plug to 20' above perforations and test by Division of Oil and Gas."

DECISION:

THE PROPOSAL IS APPROVED.

ERMA:OH

cc- P. A. W.
H. E. Winter
Long Beach

W/S

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Musser Deputy
ERMA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JUL 17 1944
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs Calif. July 15 19 44

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling,~~ plugging or altering casing at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.

Total depth 5379' - plug 5361'

13-3/8" cmtd. 757'

8-5/8" cmtd. 4005' O.K.

(565' 6-5/8" landed 4408', inc. 60' perf. G.P. 4344'. Perf. 4005-4028, 4070-4130' - deepened through)

1572' 4-3/4" cmtd. 5376' - perf. and re-perf. 5113-5158', 5168-5175', 5280-5350'

July, 1944
2. ~~Discovered~~ Produced 87 26.2 40.0 - 29 days.
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Add perforations 5175-5235' and re-perforate present perforations.
2. If wet or no fluid, plug to 5090' and test by Division of Oil and Gas.
3. Perforate 4850-4920' and test. If unsuccessful, test higher.
4. If any test is unsuccessful, plug to 20' above perforations and test by Division of Oil and Gas.

plug & alter casing

MAP MAP BOOK CLOSURE BOND FORMS
Blanket Bond
99071

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By Henry E. Winter
Division Engineer.

cc: P.A.W.

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

DIVISION OF OIL & GAS
RECEIVED
JUL 22 1941
LOS ANGELES, CALIFORNIA

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators No. 4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated 3-21-38

_____, was filed. FORWARDED
SIGNED Henry E. Winter
Date July 18, 1941 Title DIVISION ENGINEER
(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

CASING RECORD AT START OF WORK

13-3/8" C. 757'
8-5/8" C. 4005', O.K.
565' 6-5/8" L. 4408', inc. 60' perf.
CP. 4344'
Reperf: 4348-4399', Perf: 4005-4028',
4070-4130'.

CASING RECORD AT END OF WORK

13-3/8" C. 757'
8-5/8" C. 4005', O.K.
1572' 4-3/4" C. 5376'
Perf. and Reparf: 5113-58'; 5168-75';
5280-5350'
(565' 6-5/8" L. 4408', inc. 60' perf. behind
4-3/4" CP 4344', Reparf: 4348-4399'; Perf:
4005-4028'; 4070-4130').

<u>1941</u>	<u>Depth</u>	<u>Eff. Depth</u>	<u>Remarks</u>
3-19	4408	Plg. 4305	Pulled rods and tubing.
3-21	4407		Drilled out cement plug.
3-22	4408		Drilled out lead seal and bottom of liner.
3-23	4500		Drilled with 5-5/8" bits.
3-24	4555		Cored with 5-5/8" wire line core barrel.
3-28	5112		Drilled with 5-5/8" bits.
4-2	5379		Cored with 5-5/8" core barrel. Ran Schlumberger electric log and inclinometer from 4408' to 5375'. Co-ordinates at 5370', 155'S, 195'E.
4-9	5379		Under-reamed with Grant hydraulic under-reamer from 4112' to 5377'.
4-10	5379		Ran in 1572' 4-3/4" 16#, Grade "C" seamless second-hand liner, including 8-5/8" x 4-3/4" Burns liner hanger and adapter. Landed at 5376' with Baker float shoe on bottom and Baker float collar at 5361'. Cemented with 200 sacks by displacement method.
4-11	5379		Found top of cement at 3680' and drilled out to 3804' with 7-5/8" bit.

5376
15/12/41
3/8

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach

Well No. Oil Operators No. 4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated 3-21-38

_____, was filed.

SIGNED _____

Henry E Winter

Date July 18, 1941

Title DIVISION ENGINEER

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1941

Date	Depth	Eff. Depth	Remarks
4-13	5379	Plg. 5361	Drilled out cement with 3-7/8" bit and 4-3/4" casing scraper from 3804' to 3814' and from 5305' to 5361'.
4-14	5379		Bailed mud with 6-5/8" bailer to 3093' and checked bottom with bailer. After 8 hours no rise in fluid as witnessed by Corwin of Division of Oil & Gas, and casing splice approved.
4-15	"		Perforated 4-3/4" casing with Lane-Wells gun, shooting .45 caliber bullets from 5113-5137' with 48 holes. 5280-5322' with 85 holes.
4-16	"		Landed 2 1/2 upset tubing at 5167'.
4-18	"		Swabbed fluid, ran in pump and rods, installed pumping unit, and put on production.

PRODUCTION DATA

	Bbls. Gross	Bbls. Net	A.P.I. Gravity	Cut	Hours Produced
4-18	72	54	-	24.7	19
4-19	36	34	23.2	6.1	24
4-20	38	36	23.2	6.4	24
4-21	39	37	23.2	6.4	24
4-22	36	34	23.2	6.4	24
4-23	31	29	23.2	6.4	18
4-24	33	31	23.2	6.0	24
4-25	31	29	23.2	6.0	24
4-26	32	30	23.2	6.0	24
4-27	32	30	23.2	6.0	24
4-28	32	30	23.2	6.0	24
4-29	20	19	23.2	6.0	10

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated 3-21-38

_____, was filed.

SIGNED _____

Henry E Winter

Date July 18, 1941

Title DIVISION ENGINEER

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1941

Depth Eff. Depth Remarks

4-29 5379 Plg. 5361 Pulled rods and tubing.

5-1 " Bailed and swabbed perforations.

5-2 " Reperforated 4-3/4" liner with Lane-Wells gun, shooting .45 caliber bullets from 5114' to 5140', with 26 holes. 5280' to 5325', with 45 holes. Ran 2 1/2" tubing to 5290'. Ran in pump and rods. Connected pumping unit. Put on production.

	Bbls. Gross	Bbls. Net	A.P.I. Gravity	Cut	Hours Produced
5-2	37	18	23.2	50.0	4
5-3	71	69	23.2	2.4	24
5-4	34	33	23.2	2.5	24
5-5	23	22	23.2	2.5	24
5-6	27	26	23.2	2.5	18
5-7	31	30	23.2	2.5	24
5-8	6	6	23.2	2.5	4
5-9	37	36	23.2	2.5	12 (Run pressure bomb)
5-10	29	28	23.2	2.5	24
5-11	29	28	23.2	2.5	24
5-12	30	29	23.2	2.5	24
5-13	40	39	23.2	2.5	17 (Pull pressure bomb)
5-14	26	25	23.2	2.5	24
5-15	29	28	23.2	2.5	24
5-18	28	27	23.2	2.5	24
5-20	20	20	23.2	2.5	24
5-22	28	27	23.2	2.5	24
5-24	26	25	23.2	2.5	24
5-26	41	40	23.2	2.5	18
5-28	27	26	23.2	2.5	24
5-30	25	24	23.2	2.5	24
6-2	3	3	23.2	2.5	3

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

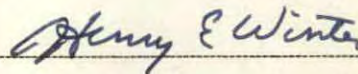
DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated 3-21-38, was filed.

SIGNED


Date July 18, 1941Title DIVISION ENGINEER

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1941 Depth Eff. Depth Remarks

6-2 5379 Plg. 5361 Pulled rods and tubing.

6-4 " Ran Lane-Wells gun perforator, shooting .45 caliber bullets. Reperforated: 5113-5140', 28 holes; Perforated: 5140-5148', 38 holes; Perforated: 5168-5175', 15 holes; Reperforated: 5280-5325', 46 holes; Perforated: 5325-5350', 50 holes. Fluid level at 1830' by bailer after perforating.

6-5 " Ran 2 1/2" tubing to 5100'.

6-6 " Swabbing through tubing. Well flows by heads part time.

PRODUCTION DATA

	Bbls. Gross	Bbls. Net	A.P.I. Gravity	Cut	Hours Produced	
6-7	52 99	51 97	23.2 26.0	2.4 2.4	19 17	(Flowing and swabbing) (Ran in rods and put on pump)
6-8	103	101	26.0	2.4	24	
6-9	60	59	21.5	2.4	24	
6-10	49	48	26.0	2.4	24	
6-11	47	46	26.0	2.4	24	
6-12	45	44	26.4	1.8	19	
6-13	60	59	26.4	1.8	24	
6-14	59	58	26.4	1.8	24	
6-15	58	57	26.4	1.8	24	
6-18	54	53	26.4	1.8	24	
6-21	54	53	26.4	1.8	24	
6-24	7	7	26.4	1.8	3	(Pull rods)

6-27 Perforations washed with Yowell Type "3" washer.

6-28 Ran 2 1/2" upset tubing to 5384', ran in rods and pump, and put on production.

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated 3-21-38

_____, was filed.

SIGNED _____

Henry E Winter

Date July 18, 1941

Title DIVISION ENGINEER

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date
1941

Depth Eff. Depth Remarks

5379 Plg. 5361

PRODUCTION DATA

	<u>Bbls.</u> <u>Gross</u>	<u>Bbls.</u> <u>Net</u>	<u>A.P.I. Gravity</u>	<u>Cut</u>	<u>Hours</u> <u>Pumped</u>
6-28	96	65	26.4	32.0	10
6-29	72	57	26.4	20.3	24
6-30	0	0	-	-	0 (Pump sanded)
7-1					(Pulled rods & tubing)
7-2	110	95	26.4	14.0	13 (Ran tubing, rods & pump)
7-3	81	62	26.4	14.0	
7-4	53	47	26.4	10.5	
7-5	54	51	26.4	5.9	
7-6	54	51	26.4	5.4	
7-7	52	49	26.4	5.4	
7-10	50	48	26.4	3.8	
7-11	49	48	26.4	3.0	24
7-12	30	29	26.4	3.3	19 (Sanded)
7-13					(Pulled rods & tubing)
7-14	85	81	26.4	4.8	24 (and re-ran)
7-15	64	61	26.4	4.8	24
7-16	54	52	26.4	4.2	24
7-17	52	50	26.4	3.0	24
7-18					

MEASUREMENT DATUM

All measurements from top of rotary table which is 18" above top of derrick floor, or 31" above top of cement foundation piers.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JUL 22 1941
LOS ANGELES, CALIFORNIA

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach

Well No. Oil Operators No. 4 Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

Henry E. Winter

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4408	4545	137	Drilled		Sand and shale.
4545	4555	10	Cored		Sand. (See Core Record)
4555	5112	557	Drilled		Sand and shale.
5112	5379	267	Cored		Sand and shale. (See Core Record)
		<u>TOTAL DEPTH - 5379'</u>			

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

DIVISION OF OIL & GAS
RECEIVED

JUL 22 1941

LOS ANGELES, CALIFORNIA

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

No. 4

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-23-41		5-5/8" Barrett Robishaw	4500	4510	0.8	0.4	0.4			Mixed burnt shale and oil sand.		
3-23-41		"	4510	4520	2.6	0.1	0.5			Hard fine to medium oil sand. Carbon particles. Good odor and fair cut. Hard burnt shale Mixed mud and fine oil sand. Slight odor and fair amber cut.		
3-23-41		"	4520	4530	1.3		0.9			Hard sandstone shell (probably at 4527' by driller) Loose mixed oil sand and mud. Fair odor and cut.		
3-23-41		"	4530	4535	0.7		0.7			Pieces of hard calcareous fine to medium grayish brown oil sand (carbonaceous). Fair odor and light amber cut. One piece has irregular vertical shale sand contact (possibly fault gouge).		
3-23-41		"	4535	4545	2.0		0.5			Hard slightly calcareous grayish brown oil sand. Fair odor and light cut.		
						1.5				1/2" pieces of firm fine to medium oil sand. Fair odor and amber cut. Oil sand has few grayish spots.		
3-24-41		"	4545	4555	0.6		0.3			Pieces of hard calcareous grayish brown oil sand. One piece has small shale streak at approximately 75°. Possibly fault gouge. Fair odor and light cut. Soft fine brown oil sand. (Mud striations). Good odor and light amber ether cut.		
						0.3						
						0.6						
3-24-41		"	4555	4565	2.6	1.0				Pieces of hard brown shale. One apparent dip of 20°. Mixed shale and oil sand and mud. (free oil) Hard brown shale.		
						0.7	0.7					
						0.2						
						1.9	0.7					

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

No. 4

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-24-41		5-5/8" Barrett Robishaw	4565	4575	1.8	0.1	0.7			Hard brown shale Fine mushy brown oil sand. Good odor and amber cut. Pieces of hard brown shale, badly broken by coring. Coring became hard at 4572'. DRILLED INTERVAL		
						1.0						
						1.1	0.7					
3-28-41		"	4575	5112						Hard calcareous shale		
		"	5112	5117	0.3	0.3						
3-28-41		"	5117	5122	2.9	0.6				Hard brown shale. Very poor possible dip of 45°. Fine brown oil sand, fair odor, good greenish cut. Firm brown shale.		
							2.0					
						0.3						
						0.9	2.0					
3-28-41		"	5122	5132	3.7	0.4				Sandy brown shale. Soft mushy fine to medium brown oil sand; fair odor, greenish amber cut. Mushiness could be from rain. Sandy brown shale Chunks of oily brown shale.		
							2.5					
						0.3						
						0.5						
						1.2	2.5					
3-28-41		"	5132	5142	0					NO RECOVERY		
3-28-41		"	5142	5147	4.5	0.4				Hard slightly calcareous brownish-black shale. Hard to firm, fine to medium, brown oil sand. Fair odor, good amber cut. Trade free oil on core.		
							4.1					
						0.4	4.1					
3-28-41		"	5147	5155	2.6	0.1			X	Sandy brown shale (Shell by driller at 5148'). Fine light brown oil sand, fair odor, dark greenish amber cut. Firm brownish-black shale, possible suggestion of 40° dip (?).		
							1.1					
						1.4						
						1.5	1.1					
3-28-41		"	5155	5156	0.0					No recovery.		
3-29-41		"	5156	5166	0.7	0.3				Chunks brown shale scattered through 6' of mud. Sandy brown shale.		
						0.4						
3-29-41		"	5166	5171	0.5	0.5	X			Chunks sandy brown shale with 2 seams fine brown oil sand. Greenish amber cut, free oil in fractures.		

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL

LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-29-41		5-5/8" Barrett-Robishaw	5171	5175	1.0	1.0				Hard brown shale.		
3-29-41		"	5175	5185	2.6		1.0			Medium to slightly coarse with pebbles, firm, light brown oil sand, good greenish-amber cut. Hard brownish-black sandy shale. Medium hard brown sandy shale. Soft, fine, light brown oil sand. Good odor, good greenish cut. Medium hard brownish-black shale. Suggestion of 45° dip. Possible fracture at 60°. Firm brown sandy shale. Soft fine light brown oil sand. Good odor.		
						0.8						
						0.1						
							0.2					
						0.1						
						0.2						
							0.2					
						1.2	1.4					
3-29-41		"	5185	5192	4.4		0.6			Fine to medium, firm to soft, light brown oil sand; fair odor.		
							0.6			Fine, firm, light brown oil sand. Dark amber cut. (Looks residual).		
							1.7			Fine to medium with few pebbles, firm to soft, light brown oil sand, fair odor, light greenish amber ether cut.		
							0.7		0.1	Hard gray sandstone shell. Fine to medium with few pebbles, firm to soft, light brown oil sand, fair odor, light greenish-amber cut.		
									0.7	Hard gray sandstone shell.		
							3.6		0.8			
3-29-41		"	5192	5199	2.8		2.8			Firm, fine to medium, light brown oil sand, poor odor, dark greenish-amber cut.		
3-29-41		"	5199	5205	0.3		0.3	X		Firm, fine, light brown oil sand with streaks gray sand. Poor odor, dark amber cut. (Looks residual).		
3-29-41		"	5205	5211	6.0		3.0			Soft to firm, fine, light brown oil sand, poor odor, dark greenish cut. Firm, biscuity, fine light brown oil sand, fair odor, dark cut.		
							3.0					
							6.0					

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

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Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

No. 4

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-29-41		5-5/8" 5211 Barrett-Robishaw	5217	5217	4.5	0.3		0.2		Firm to soft, fine to medium-fine gray sand. No odor. Hard black shale with possible fractures at 45° and 60°. Firm, fine, light brown oil sand with gray cast. No odor. Firm, fine to medium, light brown oil sand with fair odor. Good greenish-amber cut.		
						1.4						
						2.6						
						0.3	4.0	0.2				
3-29-41		"	5217	5223	1.0	1.0	X			Soft to firm, fine to medium-coarse with pebbles, brown oil sand with small streaks gray sand.		
3-29-41		"	5223	5229	2.1	2.0				Firm, fine to medium, brown oil sand with grayish cast. Dark cut. Hard brownish-black shale.		
						0.1						
3-30-41		"	5229	5235	1.0	1.0				Firm to soft, fine to medium fine, brown oil sand with grayish cast. Medium amber cut. Free oil on core and in breaks.		
3-30-41		"	5235	5241	5.0	2.3				Firm to soft, fine to medium-fine, brown oil sand with dark ether cut. Fair odor. Free oil on core and in breaks. Hard brownish-black slightly sandy shale. Firm, fine to medium brown oil sand with free oil on core. Hard brownish-black shale. Soft, mushy, fine, light brown oil sand. Hard brownish black shale. Soft fine light brown oil sand. Hard, burnt, black shale.		
						0.1						
						0.4						
						0.6						
						0.6						
						0.2						
						0.4						
						0.4						
						1.3	3.7					
3-30-41		"	5241	5245	2.0	0.4		X		Firm gray sandy shale with narrow seams gray sand at 40°. Hard brownish-black shale with fracture at 45°. Mud with hunks dark brown shale. Hard dark brown burnt shale.		
						0.4						
						0.9						
						0.3						
						2.0						
3-30-41		"	5245	5246	0.9	0.9				Hard dark brownish-black shale.		

Henry E Winter

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UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-30-41		5-5/8" Barrett-Robishaw	5246	5251	1.0	1.0				Hard brownish-black shale with small hunks and pieces of undergauge core.		
3-30-41		"	5251	5253	0.9	0.9		X		Firm brownish-black shale with a narrow seam of fine gray sand.		
3-30-41		"	5253	5259	4.0	1.5				Mud with hunks fairly soft brownish-black shale.		
						2.5				Hard, well-cut, dark brownish-black shale.		
3-30-41		"	5259	5264	5.0	5.0				Hard well-cut dark brownish-black shale. Shows no bedding but gives consistent fracture at 45° when broken.		
3-30-41		"	5264	5270	3.0	3.0				Mud interspersed with soft pieces dark brownish-black shale. Slightly sandy in spots.		
3-31-41		"	5270	5276	0.0					No recovery.		
3-31-41		"	5276	5280	0.0					No recovery.		
3-31-41		"	5280	5281	0.0					No recovery.		

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

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Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL
LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-31-41		5-5/8" Barrett-Robishaw	5281	5282	0.0					No recovery.		
3-31-41		5-5/8" Gauthey	5282	5295	12.2	2.8				Hard brownish-black shale with slickensides on 23° fractures. Apparent bedding approximately 45°. Soft to firm, fine light brown oil sand streaked with drilling mud. Good amber cut.		
						0.2				Soft to firm brown sandy shale.		
						0.5	6.5	X		Firm, fine, argillaceous light brown oil sand; good odor, dark greenish-amber cut. Occasional fine striations of sandy shale with bedding dip of approximately 35°. (At 5287', a streak of 0.05' firm gray sand and black shale Sand had light amber cut and strong gassy odor).		
						0.3	0.3			Hard brown shale, slightly sandy. Firm, fine light brown oil sand. Good odor.		
						0.3				Hard brownish-black shale. Sand shale contact at approximately 35°.		
						0.2				Firm, fine light brown oil sand. Dark greenish amber cut. Good odor.		
						1.1				Hard brownish-black shale.		
						5.0	7.2					
4-1-41		"	5295	5310	1.1	(6.0)			X	(Drilling mud with fragments hard brown black shale scattered through it. One fragment gray sandstone shell recovered).		
						0.7				Soft muddy dark brown shale.		
						0.4		X		Firm sandy shale with inter-bedded lenses of gray sand. May be burnt.		
						1.1						
4-1-41		"	5310	5325	1.2	0.1				Hard brownish-black shale, broken up by coring.		
						0.1				Firm, fine to medium-fine light brown oil sand. Good greenish-amber ether cut, fair odor.		
						0.1				Soft to firm, muddy, black shale.		
						0.3				Soft, mushy, fine to medium light brown oil sand.		
						0.1				Firm, fine to medium-fine light brown oil sand.		
						0.3		X	0.2	Hard gray sandstone shell.		
										Soft, medium light brownish-gray sand with mud striations.		
						0.2	0.8		0.2			

Henry E Winter

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UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

708A 2-41 10M
PRINTED IN U.S.A.

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
4-1-41		5-5/8" Gauthey	5325	5340	0.0					No recovery		
4-1-41		"	5340	5346	5.7		1.3			Firm, fine to medium-fine, with pebbles, light brown oil sand. Fair odor, good greenish-amber cut.		
							0.5			Firm, fine to medium-fine, brown oil sand. Good odor, good greenish-amber cut.		
							1.2			Firm, fine to medium with pebbles, light brown oil sand. Fair odor, good greenish-amber cut.		
							1.4			Firm, fine to medium-fine with few pebbles, light brown oil sand. Good greenish-amber cut. Fracture at 5344 showed slickensides at 12° dip.		
							1.1			Firm, fine to medium, slightly coarse with many pebbles, light brown oil sand.		
							0.2			Firm, fine to medium, brown oil sand. Good odor, dark greenish-amber cut.		
							5.7					
4-2-41		5-5/8" Hughes	5346	5364	2.6	(5)		X		Rotary mud with a few streaks soft black shale and gray sand.		
							0.5			Firm, medium-fine, light brown oil sand. Good odor, good greenish-amber ether cut.		
							0.3			Soft, fine to medium, brown oil sand.		
									1.8	Hard gray sandstone shell.		
4-2-41		"	5364	5379	1.5		1.5			Soft-firm, fine-medium brown oil sand. (Grayish cast). Fair, but burnt odor, dark greenish cut. Whole core slightly burnt.		

Henry E. Winter

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No. 8399

DIVISION OF OIL AND GAS

LOS ANGELES

Calif. 4/22 19 41

Union Oil Co of Calif
Name of Operator

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 43

R. 13 N. Long Sch B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work

See log - Oil Operators 4 4/2/41

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By E. H. Huggins Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-39382

Los Angeles, Calif. April 25, 1941.

Mr. W. S. Eggleston,
Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T. 4S., R. 13W. S. B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by

Chas. Corwin, Inspector

, representative of the supervisor,

on April 14, 1941. There was also present E. G. Trostel, Engineer,

W. A. Meginnis, Driller.

Casing Record 13-3/8" cem. 757', 8-5/8" cem. 4005'	Junk None
W. S. O.; 6-5/8" liner ld. 3843'-4408', c. p. 4344',	
perf. 4408'-4348', 4130'-4070' and 4028'-4005'; 4-3/4"	
liner cem. 3804'-5376'. T. D. 5379', plugged with cement	
5376'-5361'.	

The operations were performed for the purpose of demonstrating that no fluid has access to the well between the 4-3/4" and 8-5/8" casings,

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 5:00 P. M. AND MR. TROSTEL REPORTED THE FOLLOWING:

1. The hole was cleaned out to 4408'.
2. A 6-5/8" rotary hole was drilled from 4408' to 5379'.
3. Mud fluid was circulated 3-1/2 hr. before cementing the casing.
4. Electrical core readings showed the top of the Brown Zone 4630'.
5. On April 10, 1941, 1572' of 4-3/4" - 16 lb. casing was cemented at 5376' with 200 sacks of Colton cement.
6. Cement was drilled out of the 8-5/8" casing from 3680' to 3804' and out of the 4-3/4" casing from 3804' to 5361', equivalent to 35 and 118 sacks, respectively. = 153 5/8 sacks. 2 1/2 sacks used.
7. On April 14, 1941, at 9:00 a. m. the fluid in the hole was bailed to 3039'.

THE INSPECTOR NOTED THE FOLLOWING:

1. No fluid entered the well while standing 8 hr. for test.
2. The hole was open below 3915'.

The test was completed at 5:50 p. m.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT fluid does not have access to the well between the 4-3/4" and 8-5/8" casings.

cc- H. E. Winter
Long Beach
CC:G

R. D. BUSH

State Oil and Gas Supervisor

By *E. J. McGuire* Deputy

STATE OF CALIFORNIA -
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-35934

Los Angeles, Calif. January 13, 1941.

Mr. W. S. Eggleston,
Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

"OIL OPERATORS"

Your proposal to deepen Well No. 4

Section 13, T4 S., R13 W., S.B. B. & M., Long Beach Field, Los Angeles County,

dated Jan. 9, 1941, received Jan. 10, 1941, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice:

THE NOTICE STATES:

"The present condition of the well is as follows:

Total depth 4408' - Plug 4305'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408', inc. 60' perf. C.P. 4344'

Reperf. 4348-4399' and perf. 4005-4028 and 4070-4130'

It is proposed to deepen the well as a lease offset to Hilldon F.C. #4.

Last production - 1472 oil, 19,124 water - 31 days."

PROPOSAL:

"The proposed work is as follows:

1. Clean out to 4408' and deepen to approximately 5400'.

2. Cement 4-3/4" blank liner on bottom and gun perforate the top of the "S" zone and the top of the "T" Zone for production.

3. Test on production."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Any hole to be sidetracked in any oil zone shall be filled with cement, if possible.
3. This division shall be notified to examine cores and/or electrical log before running the 4-3/4" casing.

4. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:

(a) A test after drilling out the cement to within 50' of the cementing point to demonstrate that no fluid has access to the well between the 4-3/4" and 6-5/8" casings.

(b) A production test within 10 days after the well has been placed on production.

cc- H. E. Winter
Long Beach
WJC:OH

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. H. H. H.

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JAN 10 1941
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs Cal. January 9 19 41

Mr. E. HUGUENIN,

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

DEAR SIR:

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of deepening, ~~redrilling, plugging or altering casing of~~ well No. Oil Operators 4
(Cross out unnecessary words)

13, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Long Beach Oil Field, Los Angeles County.

The present condition of the well is as follows:

Total depth 4408' - Plug 4305'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408', inc. 60' perf. C.P. 4344'

Reperf. 4348-4399' and perf. 4005-4028 and 4070-4130'

It is proposed to deepen the well as a lease offset to Hilldon F.C. #4.
Last production - 1472 oil, 19,124 water - 31 days

The proposed work is as follows:

1. Clean out to 4408' and deepen to approximately 5400'.
2. Cement 4-3/4" blank liner on bottom and gun perforate the top of the "S" Zone and the top of the "T" Zone for production.
3. Test on production.

deepen

Respectfully yours

DATE	BY	TYPE	STATUS	REMARKS

UNION OIL COMPANY OF CALIFORNIA

Name of Company or Operator

By Herry E. Winter
Division Engineer.

ADDRESS NOTICE TO DEPUTY STATE OIL AND GAS SUPERVISOR IN CHARGE OF DISTRICT WHERE WELL IS LOCATED

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-3, R. 13-W, 3B B. & M.In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated March 21, 1938, was filed.

SIGNED

*Henry E Winter*Date April 4, 1938Title District Engineer

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

CASING RECORD AT START OF WORK:

Depth - 4408'
13-3/8" C 757'
8-5/8" C 4005' OK
565' 6-5/8" L 4408', inc. 60' perf.
C. P. 4344'. Reperf. 4399-4348

FOOTAGE	
112	121

CASING RECORD AT END OF WORK:

Depth - 4408, Plugged to 4305'
13-3/8" C 757'
8-5/8" C 4005'
565' 6-5/8" L 4408', inc. 60' perf.
C. P. 4344'. Reperf. 4399-4348'
Perf. 4130-4070 & 4028-4005

Eff.

1938	Depth	Depth	Remarks
3-17	4408		Took out pumping unit and pulled rods and tubing.
3-19	4408		Cleaned out liner to 4397'. Dumped 24 sacks of Victor construction cement in stages from 4397'.
3-20	4408 Plug 4305		Located top of cement plug at 4305'. Perforated 6-5/8" casing from 4130 to 4070 with 83 holes and 4028 to 4005 with 36 holes, using Lane-Wells 5-3/4" 12 shot gun with .45 caliber shells.
3-21	4408	" 4305	Landed 3" upset tubing at 3979.27'. Put well on pump at 1:00 PM 3-21-38. 180 gross, 127 net, 21.7 grav., 29.4% cut - P 11 hrs.
3-22		452 "	360 " 22.1 20.4 P 24 "
3-23		523	506 22.1 3.2 P 24 "
3-24		545	534 23.6 2.0 P 24 "
3-25		563	556 23.6 1.2 P 24 "
3-26		531	525 23.6 1.1 P 24 "
3-27		506	499 23.6 1.4 P 24 "
3-28		493	488 23.6 1.1 P 24 "
3-29		477	472 23.6 1.0 P 24 "
3-30		465	459 23.6 1.2 P 24 "
3-31		449	445 23.6 1.0 P 24 "

SUBMIT LOG IN DUPLICATE

FILL TH

INK IN WITH TYPEWRITER. WRITE ON ONE SIDE OF PAI

ILY

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 24 1938
LOS ANGELES, CALIFORNIA

Sun Oil Co

LOG OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach
 Well No. Oil Operators #4 NWLBU #8-4 Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
348' S.W. 1/4 along the prolongation of the center line of San Antonio Drive from its
 Location intersection with the center line of Riverside Drive, thence N.W. 1/4 at right angles 653'. Elevation 53.88

In compliance with the provisions of Chapter 718, Statutes of 1915, as amended, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 3-21-38

Signed

Henry E. Winters

(Engineer or Geologist)

(Superintendent)

Title

DISTRICT ENGINEER

(President, Secretary or Agent)

Commenced drilling January 1, 1938

Completed drilling

Drilling tools Cable
RotaryTotal depth 4408

Plugged depth

GEOLOGICAL MARKERS

DEPTH

Junk

Wilber Shale3586-3653Alamitos Shale3784-3842H3971I4005J4306K4348Commenced producing 2-28-38

(date)

Flowing/gas lift/pumping
(cross out unnecessary words)

Initial production

16Production after 30 days

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
<u>30</u>	<u>21.2</u>	<u>7.8</u>			
<u>15</u>	<u>21.7</u>	<u>16.5</u>			

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Casing landed in	Number of Sacks of Cement	Depth of Cementing if through perforations
<u>13-3/8</u>	<u>757</u>	<u>Surface</u>	<u>45.97#</u>	<u>New</u>	<u>Seamless</u>	<u>Slip-joint</u>	<u>17"</u>	<u>350</u>	
<u>8-5/8</u>	<u>4005</u>	<u>"</u>	<u>32# & 36#</u>	<u>New & Used</u>	<u>"</u>	<u>C</u>	<u>12 1/2"</u>	<u>400</u>	
<u>6-5/8</u>	<u>4408</u>	<u>3843</u>	<u>26#</u>	<u>New</u>	<u>"</u>	<u>C</u>	<u>7-5/8 U.R. 8 1/2"</u>	<u>125</u>	<u>4344</u>

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
<u>6-5/8</u>	<u>4348</u> ft.	<u>4408</u> ft.	<u>120 mesh</u>	<u>16</u>	<u>6</u>	<u>Kobe</u>
	ft.	ft.	<u>Reperf. 4348-4399 - 60</u>	<u>holes</u>	<u>L. & W. gun</u>	
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths Schlumberger from 757 to 4408

(Attach Copy of Log)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 24 1938
1480 100125 CALIFORNIA

LOG OF OIL OR GAS WELL—CONTINUED

FIELD Union Oil Company of California COMPANY Long Beach
Sec. 13, T. 4-S, R. 13-W, S.B. B. & M. Well No. Oil Operators #4

FORMATIONS PENETRATED BY WELL

Henry E. Winters

DEPTH TO		Thickness	Name of Formation
Top of Formation	Bottom of Formation		
0	170	170	Surface clay
170	364	194	Sand and gravel
364	388	24	Sand and clay
388	713	325	Hard sand
713	760	47	Shale
760	1577	817	Shale and streaks of sand
1577	1883	306	Hard sand
1883	2775	892	Shale and streaks of sand
2775	2863	88	Sand
2863	2990	127	Shale and streaks of sand
2990	3112	122	Sand and streaks of shale
3112	3114	2	Shell
3114	3193	79	Sand and streaks of shale
3193	3195	2	Shell
3195	3230	35	Shale and streaks of sand
3230	3231	1	Shell
3231	3371	140	Shale and streaks of sand
3371	3372	1	Shell
3372	3525	153	Shale and sand
3525	3530	5	Hard sand
3530	3560	30	Shale and sand
3560	3644	84	Sand and streaks of shale
3644	3730	86	Shale and streaks of sand
3730	3880	150	Hard sand
3880	3951	71	Shale and streaks of sand
3951	3953	2	Shell
3953	4015	62	Shale and streaks of sand (See Core Record)
4015	4408	393	Shale and sand (See Core Record)

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Union Oil Company of California FIELD Long BeachWell No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.Signed Herry E WinterDate 3-21-38Title DISTRICT ENGINEER
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date
1938

CASING RECORD AT START OF WORK				
New Well	Section	Cards	134	121

CASING RECORD AT END OF WORK

13-3/8 C. 757

8-5/8 C. 4005 O.K.

565 - 6-5/8 L. 4408, incl. 60' perf. C.P. 4344

Reperf 4399 - 4348

Depth	Eff. Depth	Remarks
-------	------------	---------

1-1	50	Spudded in with 18-5/8" rotary bit and drilled to 50'. Cemented 18-5/8 conductor pipe at 50' with 46 sax Velo cement.
1-4	758	Drilled with 17" rotary bits to 758. Cemented new 13-3/8-45.97# National Seamless slip-joint casing at 757 with 350 sax Velo treated cement. Cementing operations witnessed and approved by Karmelich of D.O.G.
1-5	911	Found top of cement at 754. Cleaned out cement and plugs and drilled ahead with 12 1/2 bits.
1-22	4015	Drilled with 12 1/2 bits to 3955 and cored with 7-5/8 core barrels to 4015. Ran Schlumberger Survey.
1-23	4015	Reamed out core hole with 12 1/2 bit to 4005. Cemented 8-5/8 - 32# Grade C (1263 of 8-5/8 - 36# on bottom) 8 thread rounded seamless casing at 4005 with 400 sax cement (200 sax Victor Oil Well and 200 sax Victor Construction)
1-28	4070	Found top of cement at 3978. Drilled out cement and plugs to 4005 and cleaned out to 4010. Water Shut Off test on 8-5/8 casing at 4005 witnessed and approved by Corwin of D.O.G. Drilled with 7-5/8 bit to 4070.
2-3	4408	Cored with 7-5/8 core barrels to 4408. Ran Schlumberger Survey.
2-5	4408	Under-reamed hole to 8 1/2" from 4007 to 4408. Landed 565' of 6-5/8 - 26# Grade C casing at 4408 including 60' of (16-2-6) 120 mesh Kobe perforated on bottom. Cemented liner through ports of Baker Whirler basket at 4344 with 125 sax of Victor Oil Well cement.

4408
60
43444408
325
4343

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Union Oil Company of California FIELD Long Beach

Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.E. B. & M.

Signed Jerry E. Winter

Date 3-21-38 Title DISTRICT ENGINEER
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	Depth	Eff. Depth	Remarks
1938			
2-10	4408	4270	Found top of cement at 3676. Drilled out cement inside of 6-5/8 liner to 3932. Bailed fluid to 2535. Water Shut Off Test on 6-5/8 spliced liner, cemented thru perforations at 4344, witnessed and approved by Karmelich of D.O.G. No rise in 8 hours. Drilled out cement to 4270.
2-11	4408	4408	Drilled out cement to 4343 and cleaned out to bottom of liner, Landed 3" upset tubing at 4318 including 521' of Baash-Ross insert tubing on bottom.
2-17	"	"	Changed from mud to water and swabbed fluid to 3000'. Very little oil or gas. Pulled tubing. Alternated between running 6-5/8 swab past perforations as agitator, and bailing mud from bottom. Landed 3" upset tubing at 4324. Installed pumping unit and started well pumping at 7 P.M., 2-17-38.
2-18			43 gross 42 net 2.8% out P10 hrs.
2-19			15 14 21.2 grav. 1.4 P24
2-20			17 16 " 1.0 P24
2-21			3 2 " 1.1 P24
2-22			31 30 " 1.0 P24
2-23			28 27 " 1.0 P24
2-23			1 1 " 1.0 P3 hrs. Pulled P&T
2-28	4408	Open 4402	Cleaned out sand to 4402. Reperforated 6-5/8 liner from 4399 to 4348 with 60 holes, using Lane-Wells 5 1/2" - 12 shot gun with .45 caliber shells. Landed 3" upset tubing at 4323. Installed pumping unit and started well pumping at 10 P.M., 2-28-38)
3-1			128 gross 0 net 100.0% out P7 hrs.
3-2			33 30 21.2 grav. 7.8 P24
3-3			27 26 " 7.8 P24
3-4			25 24 21.2 2.6 P24
3-4			23 20 21.2 13.3 P24

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Union Oil Company of California FIELD Long Beach

Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Signed Henry E Winter

Date 3-21-38 Title DISTRICT ENGINEER
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1938

Depth Eff. Depth Remarks

3-5	4408	Open	4402	21 gross	19 net	21.2 grav.	10.2% out	P24 hrs.
3-6				21	19	21.2	8.2	P24
3-7				19	16	21.2	15.3	P24
3-8				18	13	21.7	27.5	P24
3-9				18	13	21.7	35.6	P24
3-10				18	14	21.7	24.2	P24
3-11				18	14	21.7	24.2	P24
3-12				17	14	21.7	17.2	P24
3-13				17	14	21.7	17.8	P24
3-14				18	15	21.7	16.5	P24
3-15				17	14	21.7	18.4	P22 hrs. Eng.
3-16				17	14	21.7	18.4	P24
3-17				7	6	21.7	17.2	P10

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

FIELD

COMPANY

LEASE

105 ACRES 4

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-21-38	1	7-5/8" Soil	3955	3970	7.3	1.8		2.5		Firm Soft Fine Gray Sand Hard Dark Brown Shale, sandy in parts Firm, very Fine Silty Gray Sand Firm Soft Fine to Medium Gray Sand Dip 23° Hard Dark Brown Shale Firm Soft Fine to Medium Gray Sand		
						0.1		1.4				
						1.9		5.4				
1-21-38	2	"	3970	3985	13.3	0.2		0.2		Firm Soft Fine Gray Sand Hard Dark Brown Shale. Dip 16° Firm Soft Fine Gray Sand Hard Dark Brown Shale with partings of Fine Brown Oil Sand. Streak (0.1) of Fine Brown Oil Sand 1.8' from top. Shale sandy towards bottom Fractures of 48° and 24° Firm Soft Fine Brown Oil Sand. Good Odor Hard Dark Brown Shale Firm Soft Fine Brown Oil Sand Hard Dark Brown Shale Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut Hard Dark Brown Shale with inclusions of Fine Gray Sand Firm Soft Fine Brown Oil Sand. Streak of Brown Shale (0.1) 1.2' from top. Good Odor and Dark Amber Cut		
						0.2		0.3				
						6.1	0.1					
						1.2						
						0.2						
						0.6						
						0.6						
						0.9						
						0.5						
						0.1	2.3					
						7.7	5.1	0.5				
1-22-38	3	"	3985	4000	10.3	1.1				Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut Hard Dark Brown Shale. Oil in Fracture joints Firm Soft Medium Brown Oil Sand. Good Odor Hard Dark Brown Shale with inclusions of Fine Gray Sand. Sandy in spots Hard Dark Brown Shale, badly broken and mixed with mud Firm Soft, very Fine Argillaceous Silty Oil Sand, slightly mixed with mud. Fair Odor and Amber Cut Hard Dark Brown Shale with inclusions of Fine Gray Sand		
						0.3						
						0.8						
						0.6						
						6.0						
						0.6						
						0.9						
						7.8	2.5					

Henry E. Winter

ELEVATION

53.88

LOCATION

WELL

4

LEASE

OIL OPERATORS

COMPANY

UNION OIL

FIELD

LONG BEACH

CORE RECORD

UNION OIL COMPANY OF CALIFORNIA

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

FIELD UNION OIL

COMPANY OIL OPERATORS

LEASE

105 ACRES 4 CALIFORNIA

LOCATION 53.88

WELL ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-21-38	1	7-5/8" Soli	3955	3970	7.3	1.8		2.5		Firm Soft Fine Gray Sand Hard Dark Brown Shale, sandy in parts Firm, very Fine Silty Gray Sand Firm Soft Fine to Medium Gray Sand Dip 23° Hard Dark Brown Shale Firm Soft Fine to Medium Gray Sand		
						0.1		1.4				
						1.9		5.4				
1-21-38	2	"	3970	3985	18.3	0.2		0.2		Firm Soft Fine Gray Sand Hard Dark Brown Shale. Dip 16° Firm Soft Fine Gray Sand		
						6.1	0.1	0.3		Hard Dark Brown Shale with partings of Fine Brown Oil Sand. Streak (0.1) of Fine Brown Oil Sand 1.8' from top. Shale sandy towards bottom Fractures of 48° and 24° Firm Soft Fine Brown Oil Sand. Good Odor		
						0.2				Hard Dark Brown Shale		
						0.6	0.6			Firm Soft Fine Brown Oil Sand		
						0.6				Hard Dark Brown Shale		
						0.9	0.9			Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.5				Hard Dark Brown Shale with inclusions of Fine Gray Sand		
						0.1	2.3			Firm Soft Fine Brown Oil Sand. Streak of Brown Shale (0.1) 1.2' from top. Good Odor and Dark Amber Cut		
						7.7	5.1	0.5				
1-22-38	3	"	3985	4000	10.3	1.1				Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.3				Hard Dark Brown Shale. Oil in Fracture joints		
						0.8				Firm Soft Medium Brown Oil Sand. Good Odor		
						0.6				Hard Dark Brown Shale with inclusions of Fine Gray Sand. Sandy in spots		
						6.0				Hard Dark Brown Shale, badly broken and mixed with mud		
						0.6				Firm Soft, very Fine Argillaceous Silty Oil Sand, slightly mixed with mud. Fair Odor and Amber Cut		
						0.9				Hard Dark Brown Shale with inclusions of Fine Gray Sand		
						7.8	2.5					

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

FIELD

UNION OIL

COMPANY

OIL OPERATORS

LEASE

4

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-22-38	4	7-5/8" Soil	4000	4015	10.2	5.3				Hard Dark Brown, slightly Silty Shale with inclusions of Fine Gray Sand		
						0.3				Firm Fine Silty Argillaceous Brown Oil Sand with thin Streaks and partings of Dark Brown Shale		
						1.2				Hard Dark Brown Silty Shale. Streak of Fine Brown Oil Sand 0.8' from top		
						2.0				Firm Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.1				Hard Dark Brown Shale		
						1.3				Firm Soft Fine Brown Oil Sand. Good		
						6.6	3.6			Odor and Dark Amber Cut		
			4015	4070						Drilled interval		
1-29-38	5	7-5/8" parrett-Robishaw	4070	4078	2.2	0.2				Hard Dark Brown Shale		
									0.6	Hard Shale Shell. Top 0.4 badly broken in coring		
						1.0				Hard Dark Brown Silty Shale with small inclusions of Fine Gray Sand		
						0.1				Hard Brown Shale		
						0.3				Fine Brown Oil Sand mixed with mud		
						1.3	0.3		0.6	and cavings		
1-29-38	6	"	4078	4083	0					No Recovery		
1-29-38	7	"	4083	4092	3.2		0.4			Firm Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.1				Hard Dark Brown Shale		
						0.4				Firm Soft Fine Silty Argillaceous Brown Oil Sand with Streaks of Brown Shale		
						0.2				Hard Dark Brown Silty Shale		
						0.3				Firm Soft Fine Silty Argillaceous Brown Oil Sand with thin Streaks of Brown Shale		
						0.5				Hard Dark Brown Shale with thin Streaks of Fine Silty Grayish-Brown Sand		
						0.2				Hard Dark Brown Shale with Streaks of Fine Silty Brown Oil Sand		
						0.2				Firm Soft Fine Silty Argillaceous Brown Oil Sand		
						0.2				Hard Silty Brown Shale		
						0.4				Firm Soft Fine Silty Brown Oil Sand with partings of Brown Shale (Burnt in coring)		
						0.3				Hard Dark Brown Silty Shale		
						1.5	1.7					

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

FIELD

COMPANY

LEASE

4

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-29-38	8	7-5/8" Barrett-Robishaw	4092	4100	1.5	0.2	0.8			Hard Dark Brown Shale Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut Firm Fine Silty Argillaceous Brown Oil Sand. Good Odor and Amber Cut. Parting 31°		
						0.2	1.3					
1-29-38	9	"	4100	4109	0.1	0.1				Hard Dark Brown Silty Shale		
1-29-38	10	7-5/8" Soil	4109	4124	14.2		2.0			Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut Firm Soft coarse Pebbly Brown Oil Sand Firm Soft Medium to coarse Brown Oil Sand Firm Fine Silty Argillaceous Brown Oil Sand. Good Odor and Dark Amber Cut. Dip 18° Firm Soft Medium to coarse Brown Oil Sand Hard Dark Brown Shale Firm Fine Silty Argillaceous Brown Oil Sand - Dip 17° Firm Soft coarse Brown Oil Sand Firm Fine Silty Argillaceous Brown Oil Sand - Dip 17° Soft coarse Brown Oil Sand. Good Odor and Dark Amber Cut Firm Fine Silty Argillaceous Brown Oil Sand with streaks of Hard Brown Shale. Bottom 0.3 mixed with mud Hard, slightly Calcareous Shale Shell Firm Soft Fine Brown Oil Sand, grading to Medium at bottom. Good Odor and Dark Amber Cut Hard Dark Brown Shale Firm Soft Fine Silty Argillaceous Brown Oil Sand. Streak of Hard Brown Shale 0.3 from top		
						0.2						
						0.2						
						1.4						
						0.3						
						0.6						
						0.1	1.0					
										0.3		
							1.7					
						0.2						
							0.5					
						0.5	13.4		0.3			

Henry E White

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

FIELD

COMPANY

LEASE

4

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	11	7-5/8" Soli	4124	4139	13.6		1.4			Firm Soft Medium Brown Oil Sand. Good Odor and Dark Amber Cut		
						1.2	0.3			Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand		
							2.2			Firm Soft Fine to Medium Brown Oil Sand. Good Odor		
						0.5				Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand in bottom 0.3		
							3.3			Soft Fine to Medium Brown Oil Sand		
						0.4				Hard Dark Brown Shale		
							0.2			Soft Fine Brown Oil Sand		
						2.1	0.3			Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand		
							0.7			Soft Fine Silty Argillaceous Brown Oil Sand, mixed with mud. Good Odor and Dark Amber Cut		
						0.9	0.1			Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand		
						5.1	8.5					
1-30-38	12	"	4139	4155	16.0		0.5			Firm Soft Fine Brown Oil Sand, mixed with mud		
							5.8			Firm Soft Fine to Medium Brown Oil Sand, mixed with mud		
						0.1	2.7			Firm Soft Fine Silty Argillaceous Brown Oil Sand - Streaks of Hard Brown Shale 0.2 and 0.5 from top		
							6.9			Firm Soft Fine to Medium Brown Oil Sand, badly mud washed and streaked with mud		
						0.1	15.9					
1-30-38	13	"	4155	4170	6.5		0.7			Soft Fine Brown Oil Sand, badly mixed with mud		
							5.8			Firm Soft Medium to coarse, slightly Pebbly, Brown Oil Sand. Fair Odor and Dark Amber Cut		
							6.5					

Henry E Winter

CORE RECORD

LONG BEACH

FIELD

UNION OIL

COMPANY

OIL OPERATORS

LEASE

4

WELL

LOCATION

53.98

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	14	7-5/8" Soli	4170	4185	11.9	0.2	0.2			Hard Dark Brown Silty Shale		
						0.2	0.1			Firm Soft Coarse Brown Oil Sand		
										Hard Dark Brown Silty Shale with streaks and partings of Fine Brown Oil Sand		
							2.1			Firm Soft Medium to coarse Brown Oil Sand		
						0.2				Hard Dark Brown Shale		
										Contact to Sand below approximately 20°		
							1.7			Firm Soft Medium to coarse Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.8				Hard Dark Brown Silty Shale with many thin streaks of Fine Brown Oil Sand - Contact to Sand above 24°		
							0.9			Firm Soft Fine Brown Oil Sand. Bottom 0.4 Hard and contains inclusions of Black Carbonaceous Material		
										Dip 13°-16°		
						0.4				Hard Dark Brown Silty Shale		
							1.6			Firm Fine, slightly Argillaceous Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.4				Hard Dark Brown Silty Shale		
							3.0			Firm Soft Fine Brown Oil Sand, grading to Medium in bottom 1.0'.		
						2.3	9.6			Good Odor		

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

FIELD

COMPANY

LEASE

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	15	7-5/8" Soil	4185	4300	14.4		2.1			Firm Soft Medium Brown Oil Sand. Good Odor and Dark Amber Cut		
						1.1				Hard Dark Brown Silty Shale with partings of Fine Brown Oil Sand Dip 22°. Fracture of 10°		
							0.3			0.8 Hard, slightly Calcareous Shale Shell, badly fractured 0.1' from top		
						0.2				Firm Soft Fine Silty Argillaceous Brown Oil Sand with Streaks of Brown Shale		
						1.4				Hard Dark Brown Silty Shale. Dip 22°		
						0.3	0.1			Firm Soft Fine Silty Argillaceous Brown Oil Sand. Thin streaks of Brown Shale		
						0.5	1.0			Hard Dark Brown Silty Shale with streaks of Fine Brown Oil Sand		
						0.3				Firm Fine Silty Argillaceous Brown Oil Sand with streaks of Dark Brown Shale		
						0.2				Hard Dark Brown Silty Shale. Dip 25°		
						0.2	1.7			Firm Soft Fine Silty Argillaceous Brown Oil Sand. Good Odor		
						0.5	0.1			Hard Dark Brown Silty Shale		
						0.2				Firm Soft Fine Silty Argillaceous Brown Oil Sand with streaks of Brown Shale. Good Odor and Dark Amber Cut		
						0.9				Hard Dark Brown Silty Shale with streaks of Fine Brown Oil Sand		
						0.4	0.2			Soft Fine Silty Argillaceous Brown Oil Sand		
						0.3				Hard Dark Brown Silty Shale		
						0.1	0.6			Firm Fine Brown Oil Sand with streaks of Brown Shale		
						5.0	8.6		0.8			

Henry E. Winter

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

4

FIELD

COMPANY

LEASE

WELL

LOCATION

33.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	16	7-5/8" Soli	4200	4215	15.0		2.2			Firm Soft Medium to coarse Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.3	0.5			Firm Fine Silty Argillaceous Brown Oil Sand with Streaks of Dark Brown Shale		
							2.3			Firm Soft Fine to Medium Brown Oil Sand. Good Odor - Dip 25°		
						0.2				Hard Dark Brown Silty Shale		
							0.4			Firm Soft Fine Silty Argillaceous Brown Oil Sand		
						0.7	0.2			Hard Dark Brown Silty Shale with streaks of Medium to coarse Brown Oil Sand. Fracture of 39° with Slickensides along dip		
						0.2	1.0			Firm Soft Fine Silty Argillaceous Brown Oil Sand with streaks of Dark Brown Shale		
						0.3				Hard Dark Brown Silty Shale		
							6.7			Fine to Medium Brown Oil Sand with streaks of Fine Silty Argillaceous Oil Sand. Good Odor and Dark Amber Cut		
						1.7	133					

Henry E. Winters

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

FIELD

COMPANY

LEASE

4

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-31-38	17	7-5/8" Sol1	4215	4230	15.0	0.1	1.9			Firm Soft Fine Brown Oil Sand with streaks and inclusions of Fine Gray Sand. Streak of Brown Shale (0.1) 0.3 from bottom. Fair Odor and Amber Cut		
						0.5				Hard Dark Brown Silty Shale Contact to Sand above irregular and at angle of 45°		
						1.0				Apparent Dip of Shale -34° Hard Dark Brown Silty Shale, badly broken and mixed with mud		
						0.5				Firm Soft Fine Brown Oil Sand Fair Odor		
						0.6	0.2			Hard Dark Brown Silty Shale with streaks and partings of Fine Brown Oil Sand - Parting Planes 18°		
						0.2	0.7			Soft Fine Brown Oil Sand with streaks of Shale. Top mixed with mud		
						2.4	0.2			Hard Dark Brown Silty Shale with inclusions of Fine Gray Sand. Also streaks and partings of Fine Brown Oil Sand		
						2.5				Firm Soft Medium to coarse Brown Oil Sand. Fair Odor and Amber Cut. Sand looks poor		
						0.3				Hard Dark Brown Silty Shale. Fracture of 39° with Slickensides along Dip		
						0.3				Firm Soft Fine Brown Oil Sand		
						0.4				Hard Dark Brown crushed and Flaky Shale		
									1.0	Hard, slightly Calcareous Shale Shell		
						0.8		0.2		Hard Dark Brown Silty Shale		
						0.2				Soft Fine Gray Sand, mixed with mud		
								1.0		Hard Dark Brown Silty Shale		
						6.5	6.3	1.2	1.0	Soft Loose Fine Gray Sand. No Odor and light Straw Cut		

Henry E. Winter

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

4

FIELD

COMPANY

LEASE

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-31-38	18	7-5/8" Soli	4230	4245	12.6	0.4		0.8		Firm Soft Fine to Medium Gray Sand		
						0.5		1.2		Hard Dark Brown Silty Shale		
										Firm Soft Fine Dark Gray Sand		
										Hard Dark Brown Silty Shale with streaks of Fine Gray Sand in bottom		
										0.2 - Good Dip of 21°		
								4.5		Firm Soft Fine Gray Sand. Top 0.8		
										Fine Silty Dark Gray, slightly Argillaceous		
						1.5		0.2		Hard Dark Brown Silty Shale with streaks of Fine Gray Sand		
								2.5		Firm Soft Fine Gray Sand. Top 0.4		
										Fine Silty Dark Gray, slightly Argillaceous		
						0.7		0.3		Hard Dark Brown Silty Shale and Fine Silty, slightly Argillaceous		
										Dark Gray Sand. Shale and Sand badly broken and mixed with mud		
						3.1		9.5				
1-31-38	19	"	4245	4260	13.8			13.8		Firm Soft Massive Medium to coarse Gray Sand. Sand poorly sorted and slightly Pebbly in spots		
1-31-38	20	"	4260	4275	13.0			13.0		Firm to Firm Soft Massive Fine to coarse, poorly sorted Gray Sand - Pebbly in spots		
1-31-38	21	"	4275	4290	14.2			14.1	0.1	Firm Soft to Soft Massive Fine to coarse Gray Sand. Top 0.9 badly mixed with mud. Hard Calcareous Sandstone Shell 3.6 from top		
2-1-38	22	"	4290	4305	15.0			12.2		Firm Soft Massive Fine to coarse Gray Sand. Several fairly Hard, slightly Calcareous spots. Bottom 1.0 Fine and mixed with mud		
								1.9		Firm Soft Medium Gray Sand. Inclusion of Silty Brown Shale 0.8 from top		
						0.9				Hard Sandy Dark Brown Shale with inclusions of Gray Sand - Streaks of		
						0.9		14.1		Gray Sand 0.5 from top		
										Note--Bottom 2.8 of this Core was recovered in next Core bbl.		

Henry E. Winters

CORE RECORD

LONG BEACH

FIELD UNION OIL

COMPANY OIL OPERATORS

LEASE 4

WELL

LOCATION 53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
2-1-38	23	7-5/8" Soli	4305	4310	5.0	1.4 0.8 0.8 1.7 4.7		0.3		Firm Soft Coarse Gray Sand Hard Silty Dark Brown Shale Dips 17° and 22° Hard Broken Black Silty Shale Hard Black Shale Hard Silty Dark Brown Shale - Shale badly broken and Burnt in Coring		
2-1-38	24	"	4310	4319	2.4	2.4				Hard broken and fractured Black Shale, badly mixed with mud Inclusions of Fine Gray Sand in bottom 0.4		
2-1-38	25	"	4319	4329	10.0	9.0 1.0 10.0				Hard Broken and fractured, Dark Brown to Black Shale. Top 2.3 badly fractured with vertical fractures. Dip approximately 20° Hard Dark Brown to Black Silty Shale		
2-2-38	26	" Barrett- Robishaw	4329	4337	6.8	5.8 0.9 0.1 5.9		0.9		Hard Dark Brown to Black Silty Shale, sandy towards bottom. Inclusions of Fine Brown Oil Sand in bottom 0.8 Dip 20° Soft Mushy Fine Brown Oil Sand. Good Odor and Dark Amber Cut Hard Dark Brown Silty Shale with inclusions of Fine Brown Oil Sand		
2-2-38	27	"	4337	4346	8.2	0.2 1.8 0.1 2.1 4.0 4.3				Hard Dark Brown Silty Shale Soft Mushy Fine Brown Oil Sand. Good Odor and Dark Amber Cut Hard Fractured Dark Brown Silty Shale Soft Mushy Fine Brown Oil Sand. Good Odor and Dark Amber Cut Hard Dark Brown Silty Shale. Nearly vertical fractures 2.5 from bottom Dip 22°		
2-2-38	28	"	4346	4355	7.7	0.8 1.4 5.7 0.6				Hard Black Shale. Dip 23°. Fracture of 15° at bottom Soft Mushy Fine Silty Argillaceous Brown Oil Sand, mixed with mud. Fair Odor and Amber Cut Soft Medium to coarse Brown Oil Sand. Fair Odor and Dark Amber Cut		
2-2-38	29	"	4355	4364	0					No Recovery		

Hervey E. Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

4

FIELD

COMPANY

LEASE

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
2-2-38	30	7-5/8" Barrett-Robishaw	4364	4373	4.3	0.2	0.2			Soft Medium to coarse Brown Oil Sand		
						0.2				Hard Fractured and crushed Black Shale		
							0.3			Soft Fine Silty Argillaceous Brown Oil Sand, mixed with mud		
						0.2				Hard Fractured Black Shale		
							0.3			Oil Sand as above		
						0.2				Firm, very Silty Brown Shale		
							0.6			Oil Sand as above. Fair Odor and Dark Amber Cut		
						0.4				Hard Fractured Silty Black Shale with streaks of Fine Brown Oil Sand. Fractures of 21° and 37°		
							0.3			Silty Oil Sand, as above		
						0.3	0.1			Hard Fractured Silty Black Shale with streaks of Fine Brown Oil Sand		
							0.5			Firm Soft Fine to Medium Brown Oil Sand. Fair Odor and Amber Cut		
						0.7				Hard Silty Black Shale		
						2.0	2.3			Fracture of 36° 0.3 from top		
2-2-38	31	"	4373	4382	0.6	0.6				Hard Black Silty Shale		
2-2-38	32	" Soll	4382	4397	15.0	0.6				Hard Dark Brown to Black Shale		
							0.4			Soft Fine Silty Argillaceous Brown Oil Sand, mixed with mud		
						1.0	0.2			Hard Fractured and Broken Dark Brown to Black Silty Shale. Streaks of Fine Silty Argillaceous Oil Sand		
							0.3			Soft Fine Brown Oil Sand. Good Odor		
						0.2				Hard Dark Brown to Black Silty Shale. Dip 24°		
							1.5			Firm Soft Fine Brown Oil Sand. Good Odor		
							10.8			Firm Soft to Firm, Medium to coarse Brown Oil Sand, grading to coarse		
						1.8	13.2			Pebbly in bottom 4.0. Bottom 4.0 has a Grayish cast, probably due to Gray Pebbles. Good Odor and Amber Cut		
			4397	4398						Hole corrected for depth		
2-3-38	33	"	4398	4408	8.8		8.8			Firm Soft coarse Pebbly Brown Oil Sand with streaks of Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
										Total Depth - 4408		

Henry E. Winters

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T1-33997

Los Angeles, Calif. March 30, 1938.

Mr. W. S. Eggleston,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T.4 S., R. 13 W., S.B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
F. J. Karmelich, Inspector, representative of the supervisor,
on March 20, 1938. There was also present E. Winter, Engineer, and
L. O. Mitchell, Driller.

Casing Record 13-3/8" cem. 757'; 8-5/8" cem. 4005';	Junk None.
W. S. O.; 6-5/8" liner landed 3843'-4408', c. p. 4344';	
perf. 4348'-4408'; T.D. 4408', plugged with cement	
4397'-4305'.	

The operations were performed for the purpose of testing the location and hardness of a cement plug proposed to be placed from 4408' to 4320' in the process of plugging back, and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 9:00 A. M. AND MR. WINTER REPORTED THE FOLLOWING:

1. The 6-5/8" liner was cleaned out to 4397'.
2. On March 18 and 19, 1938, 24 sacks of Victor oil well cement was dumped, beginning at 4397'.

THE INSPECTOR NOTED THAT the bailer could not be spudded below 4305' and brought up a sample of set cement.

The test was completed at 9:30 a. m.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 4305' ARE APPROVED.

cc- H. E. Winter
Long Beach
FJK:OH

R. D. BUSH

State Oil and Gas Supervisor

By *E. H. Harrison* Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-32183

Los Angeles, Calif. March 21, 1938

Mr. Ed Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your supplementary proposal to drill Well No. "OIL OPERATORS" 4,
Section 13, T4S., R. 13W., S. B. B. & M., Long Beach Field, Los Angeles County,
dated Mar. 18, 1938, received Mar. 21, 1938, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"The present condition of the well is as follows:

4408 deep

13-3/8" C 757'

8-5/8" C 4005' OK

565' 6-5/8" L 4408', inc. 60' perf. C. P. 4344'

Reperf. 4348-4399

The well has been tested on the pump since March 1, 1938 with an average daily production of
18 gross, 16 net, 21.7 gravity."

PROPOSAL:

"The proposed work is as follows:

1. C. O. to 4408 and plug with cement under hydrostatic head to 4320'.
2. Test plug by Division of Oil & Gas.
3. Perforate 6-5/8" casing 4133-4005.
4. Test on production."

DECISION:

THE PROPOSAL IS APPROVED.

cc- H. E. Winter
Long Beach

WJC:G

SWR.

R. D. BUSH

State Oil and Gas Supervisor

By

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 21 1938
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs, Cal. March 18, 19 38

Mr. E. Huguenin,

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

DEAR SIR:

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or altering casing~~ at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Long Beach Oil Field, Los Angeles County.

The present condition of the well is as follows:

4408 deep
13-3/8" C 757'
8-5/8" C 4005' OK
565' 6-5/8" L 4408', inc. 60' perf. C.P. 4344'
Reperf. 4348-4399

The well has been tested on the pump since March 1, 1938 with an average daily production of 18 gross, 16 net, 21.7 gravity.

The proposed work is as follows:

1. C.O. to 4408 and plug with cement under hydrostatic head to 4320'.
2. Test plug by Division of Oil & Gas.
3. Perforate 6-5/8" casing 4133-4005.
4. Test on production.

Respectfully yours

UNION OIL COMPANY OF CALIFORNIA

Name of Company or Operator

By

Henry E. Winter
District Engineer.

Address Notice to Deputy State Oil and Gas Supervisor in Charge of District Where Well is Located

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No. 2967

DIVISION OF OIL AND GAS

LOS ANGELES

Calif. 7/16 1938

Union Oil Company, Calif.
Name of Operator

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 45

R. 13 W - Long Beach B. & M., as herewith enumerated by well numbers.

Logs _____

History _____

Core record _____

Subsequent work see log - "Oil Operators" 4 - 7/3/38

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By W. J. Lugenauer

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-33847

Los Angeles, Calif. February 24, 19 38

Mr. Ed Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T. 4S., R. 13W., S. B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
F. J. Karmelich, Inspector, representative of the supervisor,
on Feb. 10,, 19 38 There was also present R. Rampton, Engineer, and
H. Robinson, Superintendent.

Casing Record <u>13-3/8" cem. 757'; 8-5/8" cem. 4005',</u>	Junk <u>None.</u>
<u>W. S. O.; 6-5/8" ld. 3837'-4408', c. p. 4344', perf.</u>	
<u>4344'-4408'. T. D. 4408', plugged with cement</u>	
<u>4344'-3951'.</u>	

The operations were performed for the purpose of demonstrating that fluid does not have access
to the well between the 8-5/8" and 6-5/8" casings,
and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 11:00 A. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. A 7-5/8" rotary hole was drilled from 4005' to 4408'.
2. On February 5, 1938, 565' of 6-5/8" - 26 lb. casing, including 60' of perforated, was landed at 4408' and was cemented through perforations at 4344' with 125 sacks of Victor oil well cement.
3. Cement was drilled out of the 8-5/8" and 6-5/8" casings from 3676' to 3951' (equivalent to 62 sacks) and the casing was cleaned out to 3951'.
4. On February 11, 1938, at 3:00 a. m., the fluid was bailed to 2535'.

THE INSPECTOR NOTED THE FOLLOWING:

1. No fluid entered the well while standing 8 hr. for test.
2. The fluid was located at 2535'.
3. The sample of fluid from bottom tasted fresh.
4. The hole was open to 3951'.

The test was completed at 12:00 noon.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED as indicating that fluid does not have access to the well between the 8-5/8" and 6-5/8" casings.

cc- H. E. Winter
Long Beach
FJK:G
S.A.R.

R. D. BUSH
State Oil and Gas Supervisor

By E. H. Gulamin Deputy

By _____ (CONTINUED ON PAGE 2) _____ Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
OR
Special Report on Operations Witnessed

No. T 1-33775
Page 2

UNION OIL COMPANY OF CALIFORNIA

Well No. "OIL OPERATORS" 4, Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.,

2. The fluid sample taken from the bottom of the drill pipe tasted fresh.
3. The recording pressure bomb chart was torn, but could observe that the valve had been opened.

The test was completed at 4:20 p. m.

THE SHUT-OFF IS APPROVED.

cc- H. E. Winter
Long Beach

CC:OH

R. D. BUSH

State Oil and Gas Supervisor

By *E. J. Ferguson* Deputy

629 South Hill Street
Los Angeles, California
January 18, 1938.

Union Oil Company of California,
Santa Fe Springs, Calif.

Gentlemen: Attention Mr. Henry E. Winter.

This will acknowledge receipt of and thank
you for your letter of January 13, 1938, giving the
elevation of well No. "Oil Operators" 4, Sec. 13,
T. 4 S., R. 13 W., S. B. B. & M., Long Beach field,
as 53.83' U. S. G. S.

We are correcting our records accordingly.

Yours truly,



Deputy Supervisor.

WJC:EMS

CC - Mr. R. D. Bush (2)
Long Beach

Changes Made as Follows	By Whom
Weekly Statements.....	
121.....	
P.C. & L.C. Cards.....	
Production Reports.....	
Well Records { Folders.....	
{ Reports.....	
Log Books.....	
Drawings.....	
Field Notes.....	

Union Oil Company of California

CARBON COPY

Santa Fe Springs, Calif. Jan. 13, 1938

Mr. E. Huguenin, Deputy Supv.,
Division of Oil & Gas,
Los Angeles, Calif.

Dear Sir:

The elevation of the Union Oil
Company well "Oil Operators #4", in the Long
Beach Field, (Section 13, 4-S, 13-7), is 53.88
U.S.C.S.

The location is the same as
in the original notice to drill.

Very truly yours,

Henry E. Winter
District Engineer.

HEW:S

Union Oil Company of California

PRODUCERS AND REFINERS OF
CRUDE OIL, FUEL OIL, ROAD OIL AND ASPHALT,
UNION GASOLINE, KEROSENE AND DISTILLATE,
'RED LINE' LUBRICATING OILS AND GREASES.

DIVISION OF OIL AND GAS
RECEIVED
JAN 14 1938
LOS ANGELES, CALIFORNIA

Santa Fe Springs, Calif. Jan. 13, 1938

Mr. E. Huguenin, Deputy Supv.,
Division of Oil & Gas,
Los Angeles, Calif.

Dear Sir:

The elevation of the Union Oil
Company well "Oil Operators #4", in the Long
Beach Field, (Section 13, 4-S, 13-W), is 53.88
U.S.G.S.

The location is the same as
in the original notice to drill.

Very truly yours,

Henry E. Winter
District Engineer.

HEW:S

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T. 1-33680

Los Angeles, Calif. January 20, 19 38.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T. 4 S., R. 13 W., S. E. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by

F. J. KARMELICH, representative of the supervisor,

on January 4, 1938. There was also present R. Rampton, Engineer,

F. T. Shores, Driller.

Casing Record 18-5/8" cem. 50'; 13-3/8" cem. 757'; Junk XXXX
T. D. 758'.

The operations were performed for the purpose of demonstrating that the known surface waters are
adequately protected.

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 4:00 P. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. A 17" rotary hole was drilled from 50' to 758'.
2. 757' of 13-3/8" - 45 lb. casing was run into the hole to 757'.

THE INSPECTOR NOTED THE FOLLOWING:

1. The 13-3/8" casing was cemented at the reported depth of 757' with 350 sacks of Velo 24 hour cement.
2. The cement was displaced from the casing with 673 cubic feet of drilling fluid.
3. The final pressure was 500 lb.

The operations were completed at 4:42 a. m.

THE CEMENTING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT THE KNOWN SURFACE WATERS ARE ADEQUATELY PROTECTED.

cc- H. E. Winter
Long Beach
FJK:OH

R. D. BUSH

State Oil and Gas Supervisor

By

E. J. Karmelich Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P1-31816

Los Angeles, Calif. December 23, 1937.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

"OIL OPERATORS"

Your _____ proposal to drill Well No. 4,

Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,

dated Dec. 20, 1937, received Dec. 21, 1937, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"The well is 965 feet N-W'ly along the center line of Pacific Electric R.R. from the intersection with the center line of Bixby Road (Proj.) and thence 289' S-W'ly at right angles. The elevation of the derrick floor above sea level will be determined later (Approx. ~~54'~~). We estimate that the first productive oil or gas sand should be encountered at a depth of about ~~522.88~~ feet." *53.88' U.S.G.S. (Correction letter 1-18-38)

PROPOSAL:

"We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing	Weight	Grade and Type	Depth	Landed or Cemented
13-3/8	46#	New	700	Cemented
8-5/8	36#	New	4000	Cemented
6-5/8 liner	26#	New	4400	Cemented

The 6-5/8" liner to be a combination splice liner to be cemented through perforations at the base of the "JK" shale

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

- (a) Mud fluid of not less than 70 lb. per cubic foot shall be used in the drilling of the well and the column of mud fluid shall be maintained at all times to the surface, particularly while pulling the drill pipe.
(b) Adequate blow-out prevention equipment shall be provided and ready for operation at all times.
- Any hole to be sidetracked at any time during the drilling of this well shall be completely filled with cement.
- The formations to be left back of the 8-5/8" casing shall be mudded in a manner consistent with good drilling practice.
- This division shall be notified to examine cores and/or electrical log before running the 8-5/8" casing.
- THIS DIVISION SHALL BE NOTIFIED TO WITNESS:**
 - The cementing of the 13-3/8" surface casing.
 - A test of the effectiveness of the 8-5/8" shut-off.
 - A test after drilling out the cement to within 50' of the cementing point to demonstrate that no fluid has access to the well between the 8-5/8" and 6-5/8" casings.

R. D. BUSH

State Oil and Gas Supervisor

cc- H. E. Winter
Long Beach
WJC:OH

By E. Augustin Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
DEC 21 1937
LOS ANGELES, CALIFORNIA

Notice of Intention to Drill New Well

This notice must be given and surety bond filed before drilling begins

General Exploration Co.

037-06415

Santa Fe Springs, Calif. Dec. 20, 1937

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of drilling well No. "Oil Operators" 4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M., Long Beach Field, Los Angeles County.

Lease consists of N-W'ly along the center line of Pacific Electric R.R. from the intersection with the center line of Dixie Road (Proj.)
The well is 965 feet N. of S., and feet E. or W. from and thence 289' S-Wly at right angles
(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the derrick floor ~~Will be determined later~~ (Approx. 54') 53.88' U.S.G.S. above sea level is feet. (Correction letter 1-18-38)

We estimate that the first productive oil or gas sand should be encountered at a depth of about feet.

We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing, Inches	Weight, Lb. Per Foot	Grade and Type	Depth	Landed or Cemented
13-3/8	46#	New	700	Cemented
8-5/8	36#	New	4000	Cemented
6-5/8 liner	26#	New	4400	Cemented
The 6-5/8" liner to be a combination splice liner to be cemented through perforations at the base of the "UK" shale				

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing.

Address Santa Fe Springs

UNION OIL COMPANY OF CALIFORNIA,

(Name of Operator)

Telephone number Whittier 426-87

By Henry E. Winter
District Engineer

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

20
SAR
Book.
SAR.
12-21-37.

SCHLUMBERGER ELECTRICAL LOGS
C.R.G. Properties, Ltd

UNL
OIL
RUN
ORNIA

$$= \max_{j \in J} \{f_j\} = 11$$

COMPANY: ORION 111 103-06415
 FIELD: W. Long Be NH 204 8-4 "Oil Operators" 4
 WELL: Oil Operat Sec. 13-4S-13W.

Casing shoe depth:	Driller	4005	ft	Started run	6:00 a.m.
	Schlumberger		ft	Finished run	8:30 a.m.
Bottom Depth:	Driller	4408	ft	Time well occupied by outfit	2 1/2
Max depth reached by lower elect		4408	ft.	Time waiting at well	none

Max footage measured (p or S P I)	394	ft	Mileage incurred by run	15	mi
Footage missed	----	ft	Total time incurred by run	4	hr
MUD CHARACTERISTICS					
NATURE	Natural	VISCOSITY	20	LEVEL	
DENSITY	73	RESISTIVITY	4.4		
DIAMETER OF HOLE					
7-5/8"					
REMARKS					

Device: 20"

W. T. UNIT 011 RUN No.

SCHLUMBERGER ELECTRICAL LOGS

COMPANY _____ DATE 2 May 78

DATE 2-93

LOCATION
ELEVATION
DATE

0015

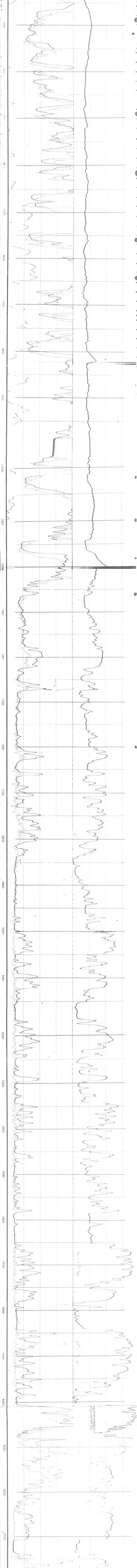
1010	ft.	T
114	ft.	T
1257	ft.	M
1	ft.	T

REMARKS	
---------	--

10

WITNESSED BY		OBSERVERS	
DEPTH	RESISTIVITY LOG	ohms. m/m	POROSITY LOG
			millivolts
0	15	30	150

Year	Percentage (%)
1900	4.0
1910	4.5
1920	5.0
1930	5.5
1940	6.0
1950	6.5
1960	7.0
1970	7.5
1980	8.0
1990	8.5
2000	16.0



SCHLUMBERGER

WELL SURVEYING CORPORATION

APR 8 - 1941

COMPANY: C.R.G. Properties, Ltd.

FIELD: (California)

WELL: NULBA 8-1/2" Oil Operators #4

SEC: 13 Sec. 13-4S-13W.

COUNTY: Los Angeles STATE: LONG BEACH

ELEV.: 60

COMPANY: UNION OIL CO.

FIELD: Long Beach

WELL: Oil Operators #4

COUNTY: Los Angeles

FILING

RUN	1-D	2	3	4	5
Date	4-2-41				
Csg. shoe	4408'				
Total depth	5379'				
Depth rchd.	5375'				
Ft. Meas.	965'				
Mud Nat.	Natural				
Dens	74				
Visc	41				
Res	4.0 @ 74.0°				
Max. Temp.					
Meas. from					
Tension	2000#				
Rig Time	4 hrs.				
Mileage	10				
Observer	R. Forsythe				
Witnessed by	Mr. H. Winter				

DIAMETER OF HOLE

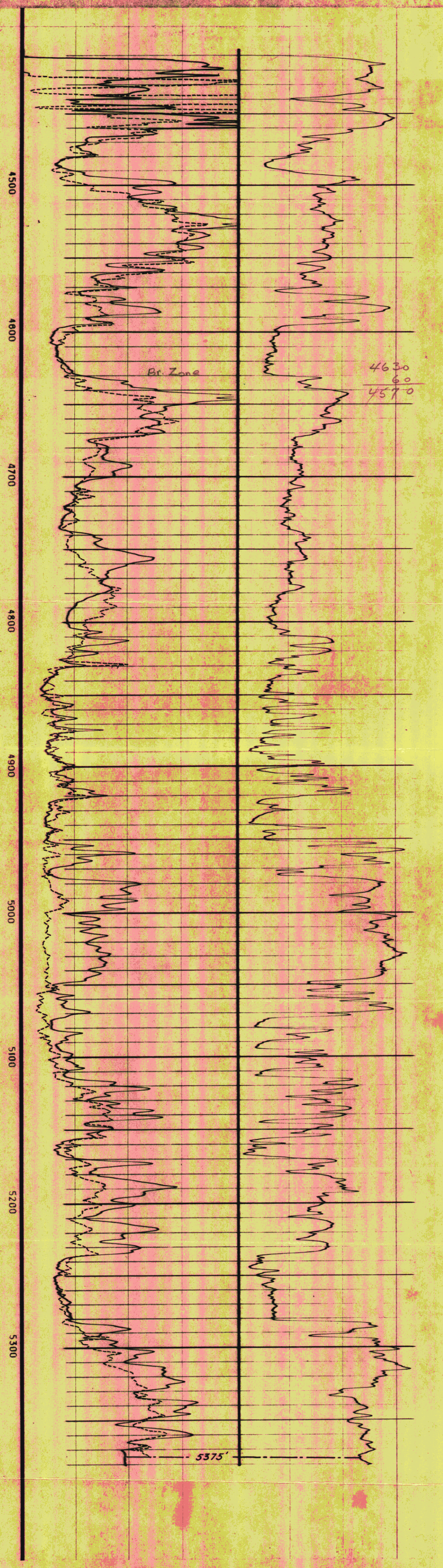
5-5/8" to 5379'

REMARKS

Device: Standard

Mud sample taken while drilling at 5374' (1 only)

DEPTH	RESISTIVITY		SELF-POTENTIAL
	NORMAL CURVE	THIRD CURVE	
0	← ohms m ² m →	30	← 100 millivolts →





Temperature Survey

WELL: 8-4

COMPANY: CRG Properties, LTD.
FIELD: Long Beach
COUNTY: Los Angeles STATE: CA

WELL DATA

DATE: 4-26-2005

TYPE LOG: TEMP
TOTAL DEPTH:
GDA: 2,910'
TOP LOGGED INTERVAL: 0'
FLUID LEVEL: 625'
PKR DEPTH:
PLUG BACK DEPTH:
RECORDED BY: John Reece

CASING: 8.625"
TUBING:
TOP PERFORMANCE: 4,435'
BOFW: 2,100'
LINE SPEED: 30 ft/min
DF above Mat:
API: 03706415

EQUIPMENT AND TEST DATA

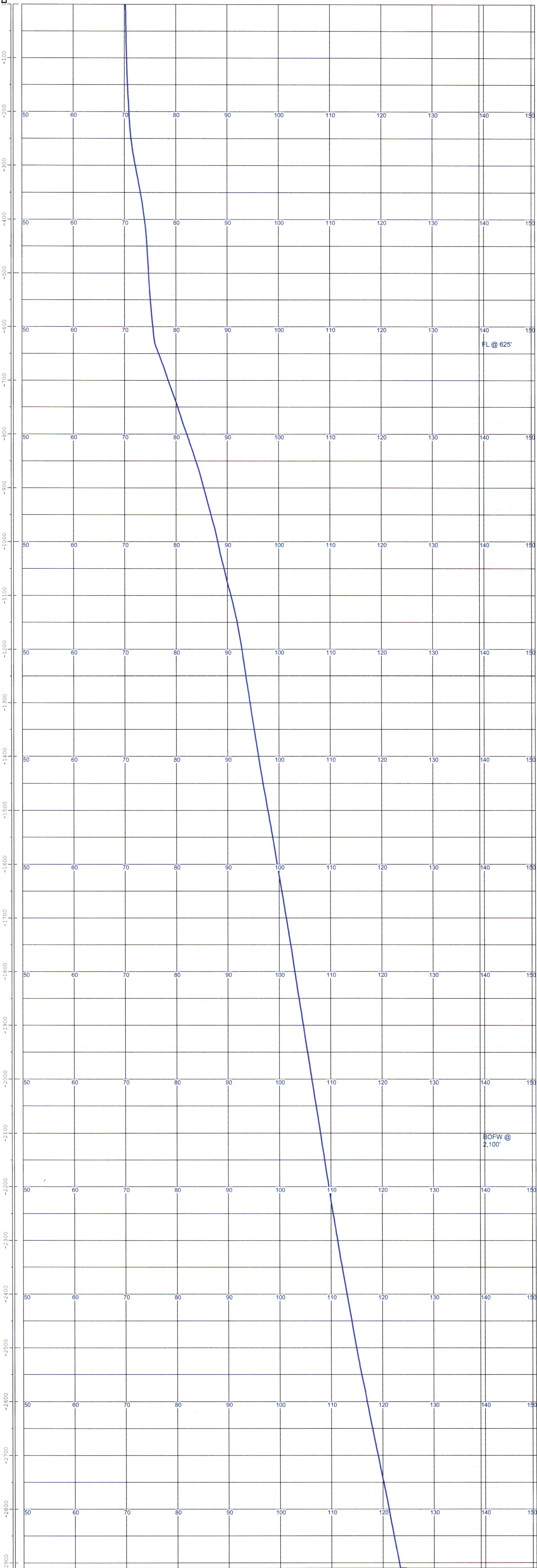
PRESSURE TBG psi:
PRESSURE CSG psi: 11
WELL STATUS: Static
TRUCK No: 1
TOOL SIZE: 1 1/4"

TOOL DATA
CALIBRATED TEMP RANGE:-0.9-253.9deg F
ACCURACY RESOLUTION: 0.25% FS
RESOLUTION: 0.002% FS
COMMENTS: MAX BH TEMP 124.56 F

DEPTH, ft

Temperature

Temperature
(Fahrenheit)





DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 100 Cypress, CA 90630-4731
Phone:(714) 816-6847 Fax:(714) 816-6853
REPORT OF WELL ABANDONMENT

Cypress, California
August 28, 2015

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your report of abandonment of well "**Nwlbu**" 8-4, A.P.I. No. **037-06415**, Section **13**, T. **04S**, R. **13W**, **SB** B.&M., **Long Beach** field, **Los Angeles** County, dated **2/9/2014**, received **3/6/2014**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

- NOTE:** 1. Surface plugging completed on 2/11/2014.
2. Site inspection made and approved on 3/21/2014.
3. This well has been abandoned in compliance with Division permit number 113-0597 issued on 7/19/2013.

Blanket Bond

EM:vm

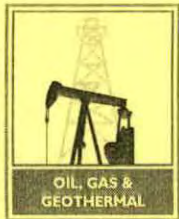
cc:

Steven Bohlen

State Oil and Gas Supervisor

By 

Daniel J. Dudak, District Deputy



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 100 Cypress, CA 90630-4731
Phone:(714) 816-6847 Fax:(714) 816-6853

No. T 115-0587

REPORT ON OPERATIONS

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Cypress, California
July 13, 2015

Your operations at well "**Nwlbu**" 8-4, A.P.I. No. **037-06415**, Sec. **13**, T. **04S**, R. **13W**, **SB B.&M.**, **Long Beach** field, in **Los Angeles** County, were witnessed on **2/11/2014**, by **Michael Okafor**, a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION: **APPROVED**

NOTE: The required Class II2M blowout prevention equipment was inspected and approved on **1/23/2014**.

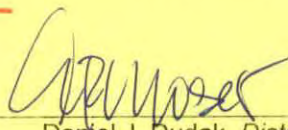
DEFICIENCIES NOTED AND CORRECTED: None

MO/epm

EXPIRED _____
CANCELLED _____
MAILED _____
EMAILED _____

Steven Bohlen
State Oil and Gas Supervisor

By _____
For _____


Daniel J. Dudak, District Deputy

FMM
7/13/2015

115-0587

CEMENTING/PLUGGING MEMO

Operator C.R.G Properties Well No. "Nwlbu" 8-4
 API No. 037-06415 Sec. 13 T. 4S R. 13W SB B&M
 Field Long Beach , County Los Angeles . On 2/11/15
 Mr. / Ms. Michael N. Okafor representative of the supervisor, was present from 1000 to 1200 .

There were also present _____

Casing record of well: 18 5/8" cem 50'; 13 3/8 cem 757'; 8 5/8" cem 4005' WSO, drilled thru 3165', cp 2465', pulled fr 220'; 5-1/2" cem 3017'- 5924', perf 4375' WSO, perfs 5712'-5776'. TD (present hole) 5925'. Plugged w/cem 5925'-2805', w/245 cf cem below 2217', w/cem 2217'-2117'±, 210'-0.

The operations were performed for the purpose of: Abandon (1)

☒ The plugging cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____ are approved.

Hole size: 17 " fr. 50 ' To 757 ' , 12 1/4 " to 4005 ' & 7 5/8 " To 5925 ' ,

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
5-1/2"	15.5#	3017'	5924'	1/17/14	T@ 5878'	446cf	5878'	2805'	0	400 psi	Prod perfs
8-5/8"	32/36#	0	4005'	1/29/14	T@ 2475'	245 cf	2080'	2217'	159 cf	1000 psi	2475'-2465'

Casing/tubing recovered: 8-5/8 " Shot/cut at 220 ' , _____ ' , _____ ' , Pulled fr. 220 ' ;
 _____ " Shot/cut at _____ ' , _____ ' , _____ ' , Pulled fr. _____ ' ;
 _____ " Shot/cut at _____ ' , _____ ' , _____ ' , Pulled fr. _____ ' ;

Junk (in hole): _____

Hole fluid (bailed to) at _____ ' . Witnessed by _____

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
80/30	1/28/14	25	2805'		2400	C.L.Cullum
72/30	1/30/14	120	2117		100	J. Collender

Note: BOPI Class IIM 1/23/14 CLC

c/o 5875'

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
1/27/2014	446 cf	T@ 5875'	1000	C.L.Cullum	2805'	3000#	1/28/14 0715	C.L.Cullum
1/29/2014	245 cf	T@ 2475'	0800	Z. Amilhussin	2217'	3000#	1/30/14 0910	J. Collender
1/30/2014	34 cf	T@ 2217'	1100	J. Collender	2117±	----	-----	-----
2/3/2014	225 cf	T@ 210'	1100	C. Wicker	20'	ATW	2/10/14 1400	P. Kaufman
2/10/2014	23 cf	T@ 20'	1530	P. Kaufman	0	----	2/11/14 1200	M. Okafor

CONTRACTOR:

allenco

UNCORRECTABLE DEFICIENCIES:

None

DEFICIENCIES NOTED AND CORRECTED:

None

CHECK LIST – RECORDS RECEIVED AND WELL STATUS

Company:	C.R.G. Properties,LTD	Well: NWLBU 8-4
API#:	037-06415	Sec. 13 , T. 4S , R. 13W . S. B. B. & M.
County:	Los Angeles	Field: Long Beach

RECORDS RECEIVED	DATE	STATUS
Well Summary (Form OG100)	3/6/2014 (2)	Active ☐ Drilling ☐
History (Form OG103)		Abandoned ☐ Idle ☐
Core Record (Form OG101)		Reabandoned ☐ Other ☐
Directional Survey		
Sidewall Samples		
Date final records received.		
Electric Logs:		
Other:		

WELL TYPE	
Oil ☐	Waterflood ☐
Gas ☐	Water Disposal ☐
Water Source ☐	Cyclic Steam ☐
Observation ☐	Steam Flood ☐
Exploratory ☐	Fire Flood ☐
Dry Hole ☐	Other ☐

EFFECTIVE DATE:	2-12-14
REMARKS:	

ENGINEERS CHECK LIST	CLERICAL CHECK LIST
☐ Summary, History & Core Record (Dupl.)	Location change
☐ Electric Log	Elevation change
☒ Operator's Name	Form OGD121
☒ Signature	Form OGD150b (Release of Bond)
☒ Well Designation	Duplicate logs to archives
☐ Location	Notice of Records Due
☐ Elevation	EDP
☒ Notices	District Date Base
☐ "T" Reports	Final Letter (OG159) 8/26/15 vm
☐ Casing Record	Update Center
☒ Plugs	
☐ Directional Survey	
☒ Production/Injection (FAP Codes: 4/2/03/00)	
☐ E Well on Prod., enter EDP	
☒ Surface Inspection Required 3/21/14 AB OK	FIELD CHECK LIST
☐ Surface inspection Waived (Island)	Date Surface Inspection Completed: 3/21/14 - AB
☐ Well site restoration deferred (common cellar)	Other:
☒ Final Letter Required AB: ☒ REAB: ☐	
☐ Other:	

RECORDS NOT APPROVED	RECORDS APPROVED
(Reason:)	(Signature) 7/28/15
	RELEASE BOND
	Date Eligible
	(Use date last needed records received.)
	MAP AND MAP BOOK

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
HISTORY OF OIL OR GAS WELL

Operator C.R.G. Properties, LTD Field Long Beach County Los Angeles
Well "NWLBU" 8-4 Sec. 13 T. 04S R. 13w sbB.&M.
A.P.I. No. 037-06415 Name Mick Beyer Title Operations Manager
(Person submitting report) (President, Secretary, or Agent)
Date 02-09-14
(Month, day, year)

Signature M. B.

Address 2109 Gundry Ave. Signal Hill, Ca. 90755

Telephone Number 562 989-6100

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

01-23-14	M.I.R.U. - Installed and tested BOPE-Witnessed by C. Cullum w/DOGGR - Secured Well
01-24-14	R.I.H. W/5 1/2" Scraper on 2 7/8" Tubing tagged fill at 5850' - Circ.with water w/returns of oily water and gas - P.O.H. - Witnessed by E. Tabor w/ DOGGR - Secured well
01-27-14	R.I.H.W/Tbg. Tagged at 5875' - Mixed and pumped 446 cu/ft. (391 sxs) class G cement Witnessed by Z. Amilhussin w/DOGGR - Secured well.
01-28-14	R.I.H. Tagged cement at 2805' - Pumped 25 bbls. 73# mud Prs. Tested casing at 500 psi good P.O.H. R.I.H. W/ 8 5/8" scraper to 2800' - P.O.H. - R.I.H. W/CBL - Perforated from 2475' to 2465' - P.O.H. Witnessed by C. Cullum w/DOGGR - Secured well
01-29-14	R.I.H. w/tbg.tail at 2475' mixed and pumped 245 cu/ft.(215 sxs) class G cement - Squeezed away 134 cu/ft prs. At 1000 psi. - Witnessed by Z. Amilhussin w/ DOGGR - secured well
01-30-14	R.I.H. Tagged cement at 2217' = 67' low - Pumped 120 bbls. 73# mud - prs. Tested csg. 500# good - mixed and pumped 34 cu/ft.(30 sxs) class G cement - P.O.H.- R.I.H. Cut 8 5/8" at 220' Witnessed by J. Collender w/DOGGR -secured well
01-31-14	Removed B.O.P.E. Pulled 220' of 8 5/8 " casing - Witnessed by Z. Amilhussin w/DOGGR - secured well
02-03-14	R.I.H. W/tbg. Tail at 210' mixed and pumped 225 cu/ft.(197 sxs) class G cement - cement to surface - P.O.H.- Witnessed by C. Collum w/DOGGR - R.D.M.O.
02-10-14	Dug down around well and cut casing 5' below surface - Topped off surface plug w/ 23 cu/ft.(20sxs) class G cement Witnessed by P. Kaufman w/DOGGR - Secured well
02-12-14	Z. Amilhussin w/DOGGR witnessed surface tag and welding of I.D.Plate - Backfilled well location - Job complete.



BLOWOUT PREVENTION EQUIPMENT MEMO

Operator C.R.G. Properties, LTD

Well "NWLBU" 8-4

Sec. 13 T. 4S R. 13W

Field Long Beach

County L.A.

Spud Date

VISITS:

Date

Engineer

Time

Operator's Rep.

Title

1st 1/23/14

Callie L. Cullum

(1515 to 1530)

2nd

(to)

Contractor Allenco

Rig # 2

Contractor's Rep. & Title Derick Beyer, Driller (Allenco)

Casing record of well: memoOPERATION: Testing (inspecting) the blowout prevention equipment and installation. Critical well? Y ☒ N ☐

DECISION: The blowout prevention equipment and its installation on the 8 5/8" casing are approved.

Proposed Well Opns: Abandonment

MACP:

psi

Hole size:

" fr.

' to

' to

' &

' to

REQUIRED BOPE CLASS:

II3M

CASING RECORD OF BOPE ANCHOR STRING

Size	Weight(s)	Grade(s)	Shoe at	CP at	Cement Details		Top of Cement	
							Casing	Annulus
8 5/8"	32#		1262'					

BOP STACK**TEST DATA**

API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul	Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.
Rd	2 7/8	Townsend	81	9	3M		1						
Rd	CSO	Townsend	81	9	3M		1						

ACTUATING SYSTEM

TOTAL: 2

AUXILIARY EQUIPMENT

Accumulator Unit(s) Working Pressure					psi		Connections											
Total Rated Pump Output					gpm		Fluid Level		No.	Size (in.)	Rated Press	Connections			Test Press.			
Distance from Well Bore					ft.		ok					Weld	Flange	Thread				
Accum. Manufacturer					Capacity		Precharge											
1					gal.		psi		x	Fill-up Line								
2					gal.		psi		x	Kill Line								
									3	Control Valve(s)								
CONTROL STATIONS					Elec.		Hyd.		Pneu.		Check Valve(s)							
Manifold at accumulator unit											Aux. Pump Cnnct.							
Remote at Driller's station											Choke Line							
Other: hand pump							x				Control Valve(s)							
EMERG. BACKUP SYSTEM					Press.		Wkg.Fluid		Pressure Gauge									
N ₂ Cylinders					1	L= 55	"		1825 psi	4	gal.					Adjstble Choke(s)		
Other:					2	L=	"				gal.					Bleed Line		
					3	L=	"				gal.					Upper Kelly Cock		
					4	L=	"				gal.					Lower Kelly Cock		
					5	L=	"				gal.					Standpipe Valve		
					6	L=	"				gal.					Stdndpipe Pres. Gau.		
					TOTAL: 4				gal.	x	Pipe Safety Valve					27/8	3M	
HOLE FLUID					Alarm Type				Internal Preventer									

HOLE FLUID MONITORING EQUIPMENT**Alarm Type**

Audible Visual Class

Calibrated Mud Pit			A
Pit Level Indicator			B
Pump Stroke Counter			
Pit Level Recorder			
Flow Sensor			C
Mud Totalizer			
Calibrated Trip Tank			
Other:			

Hole Fluid Type

Weight

Storage Pits (Type & Size)

no fluid has been added 70 bbl Mud Tank

(fluid in well unknown) 2,500 bbl storage tanks

REMARKS AND DEFICIENCIES: two of the valves on the kill line need handles.

"NWLBu" 8-4

037-06415

18 5/8"

13 3/16"

8 5/8"

5 1/2"

50'

ETOC 74'

17" HOLE

CEM. 350 SX 751'

12 1/4" HOLE

ETOC 2883'

DRILLED THRU 3165'

3017'

CEM. 400 SX 4005'

PERF 4375' WSD

7 5/8" HOLE

5712

5776'

5924'

5878'

TD (PRESENT HOLE) 5925'

BEW 2250'

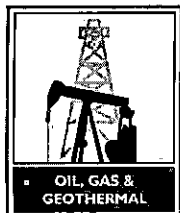
UHZ 2475'

WILBUR 3680'

ALAMITOS 3882'

BROWN 4400'

EFM 9/13



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

No. **P 113-0597**

PERMIT TO CONDUCT WELL OPERATIONS

**CRITICAL WELL
CORRECTED COPY**

Old	New
412	412
FIELD CODE	
03	03
AREA CODE	
00	--
POOL CODE	

Cypress, California
July 19, 2013

Mr Mark Pender, Agent
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your proposal to **Abandon** well "NWLBU" 8-4, A.P.I. No. **037-06415**, Section **13**, T. **04S**, R. **13W**, **SB B. & M.**, **Long Beach** field, **Northwest Extension** area, **Brown** pool, **Los Angeles** County, dated **7/10/2013**, received **7/10/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
 - a. Class **II3M**, with hydraulic controls, during **abandonment** operations.
 - b. A **3M** lubricator for **wireline** operations.
2. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
3. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of **72** lbs/cu.ft and a minimum gel shear strength of **25** lbs./100 sq. ft.
5. The proposed cement plug from **5878'** to **3480'** shall extend from **5878'** to at least **2817'**.
6. Prior to shooting any perforations braidenhead squeezes, a pressure test of the **8-5/8"** casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
7. The well location shall be surveyed prior to burying the well, and the survey shall be filed with this office. Latitude and longitude shall be in decimal degrees, to six decimal places, in NAD83.
8. All casing must be removed from between 5' and 10' below ground level.
9. Well site restoration shall be completed within 60 days following the completion of plugging operations.
10. No program changes are made without prior Division approval.
11. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.

(Continued on page 2)

No Bond Required Bond

cc: Update
EDP
AllenCo.
DOGGR - Dist. 1 (Cypress)

Tim Kustic
State Oil and Gas Supervisor

Engineer Ellen Plaza Moser
Office (714) 816-6847

By _____
For: Daniel J. Dudak, District Deputy

EPM/epm

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

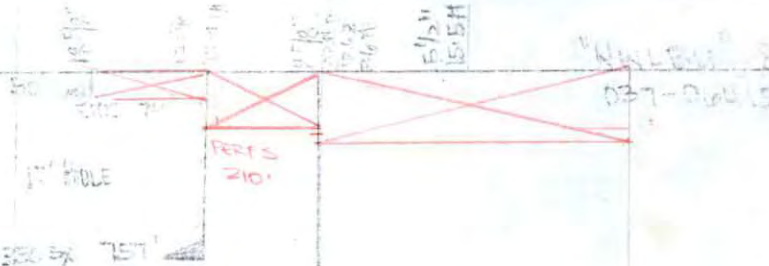
- b. Witness the clean-out depth at **5878'**.
- c. Witness the placing, location and hardness of the cement plug from **5878'** to **2817'**.
- d. Witness the mudding operations.
- e. Witness a pressure test of the **8-5/8"** casing.
- f. Witness the cement squeeze through the **perforations** at **2465'** or through a retainer or packer (if casing integrity is not demonstrated).
- g. Witness the placing, location and hardness of the cement plug from **2475'** to **2150'**.
- h. Witness the cement squeeze through the **perforations** at **200'** through a retainer or packer (if casing integrity is not demonstrated).
- i. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- j. Inspect the restored well site.

NOTE:

- 1. Upon completion of the proposed work, a History of Oil or Gas Well (form OG103) shall be submitted to this office.
- 2. The well abandonment history (History of Oil or Gas Well - form OG103), must include a description of the removal or abandonment of the well flowline and any associated piping.
- 3. Hydrogen sulfide gas (H₂S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
- 4. The operator shall isolate the following zones:
 - a. **Base of the Freshwater Sand at 2250'.**
 - b. **Top of the Upper Gas Zone at 2475'.**
 - c. **Top of the Wilbur Zone at 3680'.**
 - d. **Top of the Alamitos Zone at 3882'.**
 - e. **Top of the Brown Zone at 4400'.**

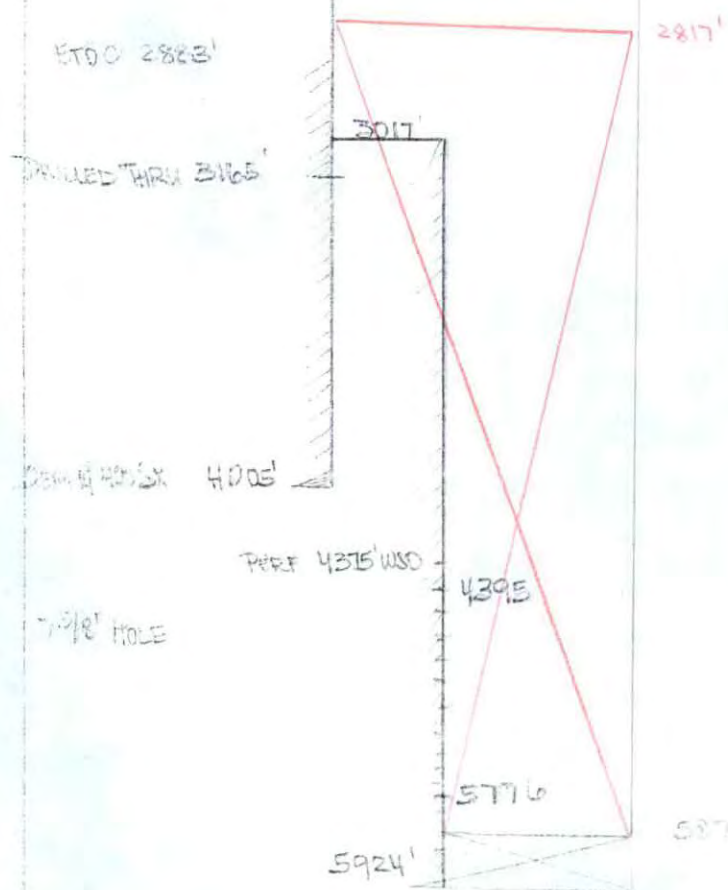
Failure to achieve adequate zonal isolation may have negative impacts on current and future operations. In addition, failure to achieve adequate zonal isolation will also be noted on the Report of Operations (OG 109).

PROPOSED



3FW 2250'

W112 2475'



ETOC 2823'

DRILLED THRU 3165'

DRILLED THRU 4005'

PART 4375 WSD

7 7/8" HOLE

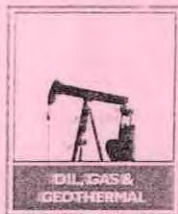
W112 3680'

ADAMTOS 3882'

BROWN 4400'

TO CORRENT REFERENCE

5/11/12



URAL RESOURCES AGENCY OF CALIFOR
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

PERMIT TO CONDUCT WELL OPERATIONS

**CRITICAL WELL
CORRECTED COPY**

No. P 113-0597

Old	New
412	412
FIELD CODE	
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POOL CODE	

Cypress, California
July 19, 2013

Mr Mark Pender, Agent
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
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6. Prior to shooting any perforations braidenhead squeezes, a pressure test of the **8-5/8"** casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
7. The well location shall be surveyed prior to burying the well, and the survey shall be filed with this office. Latitude and longitude shall be in decimal degrees, to six decimal places, in NAD83.
8. All casing must be removed from between 5' and 10' below ground level.
9. Well site restoration shall be completed within 60 days following the completion of plugging operations.
10. No program changes are made without prior Division approval.
11. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.

(Continued on page 2)

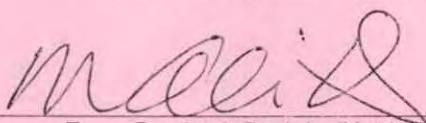
No Bond Required Bond

cc: Update
EDP
AllenCo.
DOGGR - Dist. 1 (Cypress)

Engineer Ellen Plaza Moser
Office (714) 816-6847

EPM/epm

Tim Kustic
State Oil and Gas Supervisor

By 
For: Daniel J. Dudak, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

- b. Witness the clean-out depth at **5878'**.
- c. Witness the placing, location and hardness of the cement plug from **5878'** to **2817'**.
- d. Witness the mudding operations.
- e. Witness a pressure test of the **8-5/8"** casing.
- f. Witness the cement squeeze through the **perforations** at **2465'** or through a retainer or packer (if casing integrity is not demonstrated).
- g. Witness the placing, location and hardness of the cement plug from **2475'** to **2150'**.
- h. Witness the cement squeeze through the **perforations** at **200'** through a retainer or packer (if casing integrity is not demonstrated).
- i. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- j. Inspect the restored well site.

NOTE:

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- 3. Hydrogen sulfide gas (H₂S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
- 4. The operator shall isolate the following zones:
 - a. **Base of the Freshwater Sand at 2250'.**
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 - c. **Top of the Wilbur Zone at 3680'.**
 - d. **Top of the Alamitos Zone at 3882'.**
 - e. **Top of the Brown Zone at 4400'.**

Failure to achieve adequate zonal isolation may have negative impacts on current and future operations. In addition, failure to achieve adequate zonal isolation will also be noted on the Report of Operations (OG 109).



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

PERMIT TO CONDUCT WELL OPERATIONS

CRITICAL WELL

No. P 113-0597

Old	New
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Cypress, California
July 19, 2013

Mr Mark Pender, Agent
C.R.G. Properties, LTD (C0250)
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7. All casing must be removed from between 5' and 10' below ground level.
8. Well site restoration shall be completed within 60 days following the completion of plugging operations.
9. No program changes are made without prior Division approval.
10. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.
 - b. Witness the clean-out depth at **5878'**.

(Continued on page 2)

No Bond Required Bond

cc: Update
EDP
AllenCo
DOGGR - Dist. 1 (Cypress)

Engineer Ellen Plaza Moser
Office (714) 816-6847

EPM/epm

Tim Kustic
State Oil and Gas Supervisor

By *[Signature]*
For: Daniel J. Dudak, District Deputy

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- c. Witness the placing, location and hardness of the cement plug from **5878'** to **3480'**.
- d. Witness the mudding operations.
- e. Witness a pressure test of the **8-5/8"** casing.
- f. Witness the cement squeeze through the **perforations** at **2465'** or through a retainer or packer (if casing integrity is not demonstrated).
- g. Witness the placing, location and hardness of the cement plug from **2475'** to **2150'**.
- h. Witness the cement squeeze through the **perforations** at **200'** through a retainer or packer (if casing integrity is not demonstrated).
- i. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- j. Inspect the restored well site.

NOTE:

- 1. Upon completion of the proposed work, a History of Oil or Gas Well (form OG103) shall be submitted to this office.
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- 3. Hydrogen sulfide gas (H₂S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
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NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

P# 113-0597

CJ/LM

FOR DIVISION USE ONLY			
Bond	Forms		
	OGD114	OGD121	
BB	7/3/13	7/10/13	df

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ well "Nwlbu" 8-4, API No. 037-06415

(Check one)

Sec. 13, T. 4s, R. 13w, S.B. B.&M., Long Beach Field, Los Angeles County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

See Attachment

The total depth is: 5925 feet.

The effective depth is: 5878 feet.

Present completion zone(s): see attachment

(Name)

Present zone pressure: N/A psi.

Oil or gas shows: see attachment

feet.

Depth to base of fresh water: 2250

feet.

(Name and depth)

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): see attachment

feet.

(Depth of interval)

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes ☒ No ☐

The proposed work is as follows: (A complete program is preferred and may be attached.)

See Attachment.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator

C.R.G. Properties, Ltd

Address

2109 GUNDRY AVE.

City/State

SIGNAL HILL

Zip Code

90755

Name of Person Filing Notice

MICK BEYER

Telephone Number:

562 989-6100

Signature

M. B.

Date

07-10-13

Individual to contact for technical questions:

MICK BEYER

Telephone Number:

310 505-9787

E-Mail Address:

Mbeyer@allencoca.com

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

DOGGR
Received-

JUL 10 2013

to Elox 7/10/13

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

C.R.G. Properties, Ltd. Well "Nwlbu" 8-4 (037-06415), Sec.13, Twn. 4S, Rge. 13W, S.B. B&M, Long Beach Oil Field

According to Division records, the present condition of the well is as follows:

1. **Location:** See map Exhibit A - Attachment II
2. **Accessibility:**
3. **Status:** Idle deserted
4. **Total Depth:** 5925'. **Effective Depth:** 5878'. **Elevation of Kelly Bushing (KB) above sea level:** 60'.
5. **Casing:** 18-5/8" casing cemented 50'; 13-3/8" 36# casing cemented 757' with estimated top of cement behind pipe at 124' +/-; 8-5/8" cemented 4005' with estimated top of cement behind pipe at 2890', WSO; 5-1/2" cemented 3017'-5925'. perfs. 4375' WSO, 5712'-5730', 5734'-5754', 5761'-5776'.
8. **Tubing:** Unknown **Rods:** Unknown
7. **Base of Fresh Water (BFW):** 2250'
8. **Producing Zone(s):** Brown
9. **Hole Fluid:** Unknown
10. **Junk:** Unknown
11. **Plugs:** 5878 to 5925,
12. **Comments:** Top of Brown zone 4400', top of Alamos zone 3882', top of Wilbur zone 3680', and top of Upper Gas zone 2475'.

The following operations are necessary to plug and abandon the well:

1. A Notice of Intention to Abandon (form OG 108) is to be filed with this Division at least 10 days prior to commencing work. Work is not to begin until a Permit to Conduct Well Operations (Form OG 111) has been issued. All well operations are to be witnessed by a representative of this Division as directed in the Permit to Conduct Well Operations.
2. The abandonment contractor will review job safety programs (JSP) with all crewmembers prior to work startup and/or if conditions change. Monitor well for any leaking gas. Position gas monitors and ventilation fans, if warranted before moving in any other equipment or personnel.
3. Adequate blowout prevention equipment, as defined in Division's publication No. M07, shall be installed and maintained in operating condition at all times. The minimum requirements are:
 - a. A 3M rod Reagan or equivalent BOPE for pulling rods and pump operations.
 - b. A Class II3M, with hydraulic controls, during abandonment operations.
 - c. A 3M lubricator for wire line operations.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs/cu.ft and a minimum gel shear strength of 25 lbs. /100 sq. ft. All cement plugs are to have a minimum compressive strength of 1000 psi and maximum liquid permeability of 0.1 md. All depths noted are from the KB.
5. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
6. Kill well. Install and function test rod Reagan or equivalent BOPE. Pull out of the hole with rods and pump.

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

7. Remove rod Reagan. Install and function test Class II3M BOPE (function test BOPE each day thereafter).
8. Pull out all production tubing.
9. Use appropriate combination tools to clean out to 5878'.
10. Run in scraper. Scrape the 8-5/8" and 5 1/2" casings.
11. Run in hole with tubing (if tag high, clean out fill to 5878').
12. The well shall be plugged with cement from 5878' to 3480'.
13. Prior to shooting any perforations for braidenhead squeezes, a pressure test of the casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a packer is required for squeeze operations.
14. The 8-5/8" casing shall be perforated from 2475 to 2465'. Get an injection rate or a breakdown.
15. Sufficient cement shall be squeezed into the perforations to fill to 2150' outside the 8-5/8" casing.
16. The well shall be plugged with cement from 2475' to 2150'.
17. The 8-5/8" casing shall be cut and pulled from 210'.
18. The 13" casing shall be perforated from 210' to 200'. Sufficient cement shall be squeezed into the perforations to fill to surface.
19. The well shall be plugged with cement from 210' to surface.
20. All casing must be removed from between 5' and 10' below ground level.
21. A steel plate, at least as thick as the outer well casing and bearing the last five digits of the API number, shall be tack welded around the top of the outer casing.
22. Cellar, production pads and pipelines shall be removed and the resulting excavations filled with earth and compacted properly to prevent settling.
23. Remaining buried pipelines that cannot be removed shall be purged with clean water. Abandon line by pumping approved cement slurry mixture, weld steel cap on both ends of the line and bury.
24. All equipment, casing, or junk that requires removal to implement restoration to lawful conditions shall be removed and properly disposed of in accordance with environmental laws and in accordance with instructions from the Division of Oil and Gas. All liquid wastes shall be removed and properly disposed.
25. A well History (Form OG 103) shall be filed in duplicate with the Division within 60 days of completing the work and must include a description of the removal or abandonment of the well flow line and any associated piping.

1 DEPARTMENT OF CONSERVATION
2 Division of Oil, Gas, and Geothermal Resources
3 5816 Corporate Avenue, Suite 200
4 Cypress, California 90630
5 Telephone (714) 816-6847
6 Facsimile (714) 816-6853
7

8 **STATE OF CALIFORNIA**
9 **NATURAL RESOURCES AGENCY**
10 **DEPARTMENT OF CONSERVATION**
11 **DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**

12
13 **REVISED**

14
15 **FORMAL ORDER TO:**
16 **PLUG AND ABANDON WELLS &**
17 **RESTORE LEASE CONDITIONS**
18

19
20 **NO. 1032**

21 **Dated: October 18, 2012**

22 **Operator: C.R.G. Properties, Ltd. (C0250)**
23

24 **BY**

25 **Tim Kustic**

26 **STATE OIL AND GAS SUPERVISOR**
27

1 DEPARTMENT OF CONSERVATION

2 Legal Office

3 801 K Street

4 Sacramento, California

5 Telephone (916) 323-6733

6 Facsimile (916) 445-9916

7
8 **STATE OF CALIFORNIA**

9 **NATURAL RESOURCES AGENCY**

10 **DEPARTMENT OF CONSERVATION**

11 **DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**

12
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18 5/8" #10 1/2

13 3/8" 45# 17"

8 5/8" 32# 12 1/4"

6 5/8" 26# 7 5/8"

1/1/38
CEM 46# 50

17" 50-758

1/4/38 CEM 330# 757
(380CF)

ETOC
124

ETOC
2890

1/23/38 CEM 400 5x 4005
(460CF)

Perf: 4005-4130
3/20/38

Perf: 4348-4408
2/5/38

@ 4344 CP CEM 125#
(144CF)

1/5/38 CEM 41 2/5/38

12 4408

+04408

T.O.L. 3843

CEM 4305-4397 25# 3/18-19/38
(29CF)

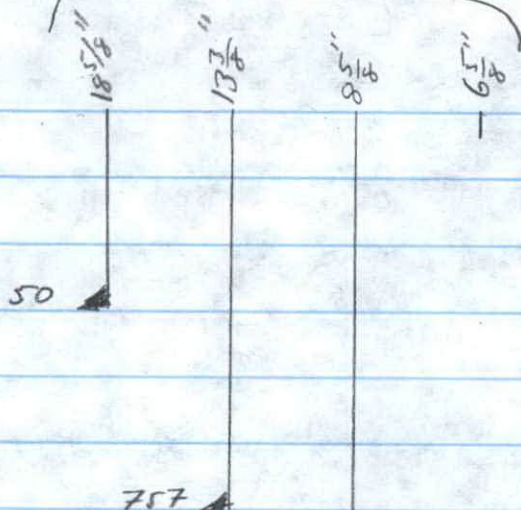
original Hole

1/28/13

037-06415

Sheet 2 of 3

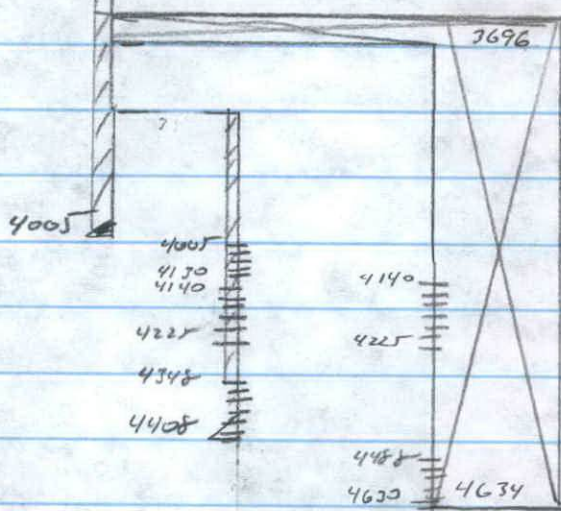
See Sheet 1



4 3/4" 16 # 6 5/8"

ETOC
2890

WINDOW MILLED 3163-7164 FOR S.T. (see sheet 3)



T.O.C. 3804 (4 7/8")

T.O.C. 3843 (6 5/8")

CEM 3696-4634 100 SX
6/8/67

Perf: 4140-4225
8/26/59 (4 7/8" + 6 5/8")

Perf: 4488-4535
10/45-11/45

Perf: 4850-4920
8/18/45

Perf: 5113-5140, 5280-5325
4/15/41-5/12/41

Re-perf: 5113-5325 6/14/41

4/10/41 CEM 200SX
(230CF)

Re-perf: 5113-5350 8/14/44

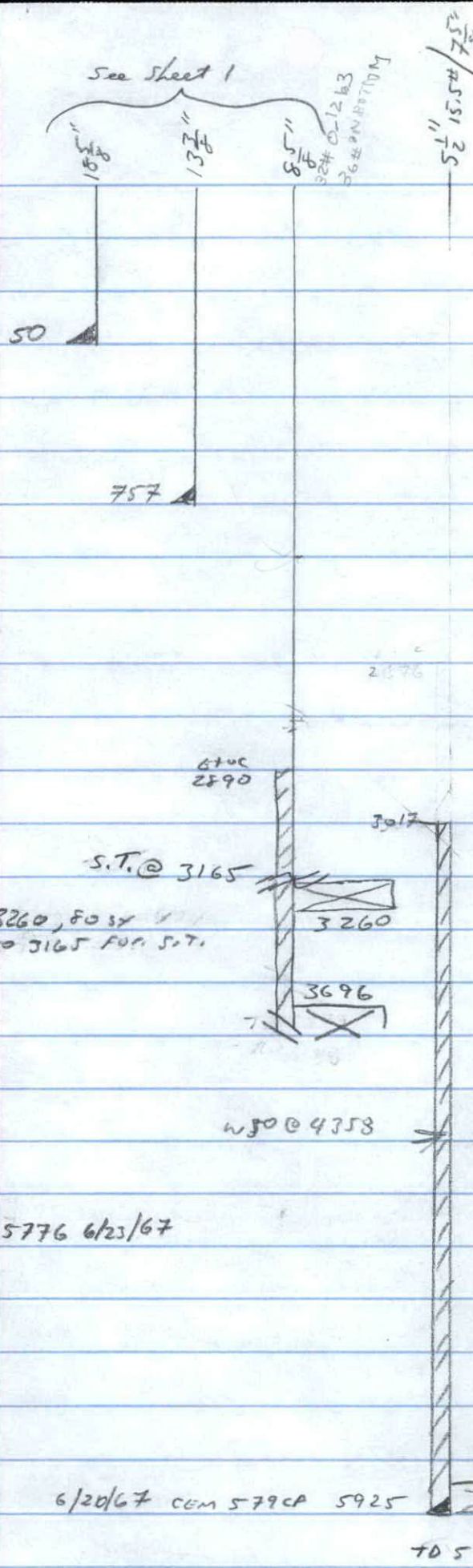
CEM plug 5361-5376

TO 5379

ADD
1/28/10

* Equivalent to 153 SX drilled out of hole
upon cleanout, leaving 47 SX to be outside casing.

RD 1 - New work (deepening w/ no S.T.)



BFW 2250'
UPPER CWS (A) 2475'
UPPER WILBUR 3880'
ALAMITOS Lower 3882'
BROWN 4400'

T.O.L. 3017 (6/20/67)

PIPS: 5712-5776 6/23/67

12/1/67

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF PROPERTY AND WELL TRANSFER

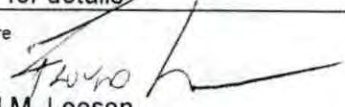
Field or County Long Beach	District District 1 (Cypress, California)
Former owner Pacific Energy Res. P0252	Date July 26, 2000

Well Name	API Number	Section Township Range
"Nwlbu" 5-2	037-00397	Sec. 13-4S-13W
"Nwlbu" 5-3	037-09796	Sec. 13-4S-13W
"Nwlbu" 5-4	037-09797	Sec. 13-4S-13W
"Nwlbu" 8-3	037-06496	Sec. 13-4S-13W
"Nwlbu" 8-4	037-06415	Sec. 13-4S-13W
"Nwlbu" 8-7	037-22512	Sec. 13-4S-13W
"Nwlbu" 9-2	037-13525	Sec. 13-4S-13W
"Nwlbu" 9-3	037-09791	Sec. 13-4S-13W
"Nwlbu" 9-4	037-00392	Sec. 13-4S-13W
"Nwlbu" 9-5	037-00142	Sec. 13-4S-13W
"Nwlbu" 9-6	037-00393	Sec. 13-4S-13W

Description of the land upon which the well (s) is (are) located.

See above

Date of transfer May 9, 2000	New owner C.R.G. Properties, Ltd. C0250	Type of organization Corp./Ltd.
	Address: 15332 Antioch Street, Suite 338 Pacific Palisades, CA 90272	Telephone (310) 808-9071
Reported by	OG34A received 6/2/2000 signed by both parties	
Confirmed by	Same as above	
New operator new status PA	Designation of Agent Mark Pender	
Old operator new status PA	Remarks See operator file for C.R.G. Properties, Ltd. for details	

OPERATOR STATUS ABBREVIATIONS	Deputy Supervisor R. K. Baker	Signature  Floyd M. Leeson Operations Engineer																																										
PA - Producing Active																																												
NPA- No potential, Active																																												
PI- Potential Inactive																																												
NPI-No potential, Inactive																																												
Ab-Abandoned or No More Wells																																												
cc: Update; Envir Dsk; File Conservation Committee Harold W. Bertholf, Inc. LA County Assessor Sacramento EDP Cypress EDP	FORM AND RECORD CHECK LIST <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Form or Record</th> <th>Initials</th> <th>Date</th> <th>Form or Record</th> <th>Initials</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Form OGD121</td> <td>N/A</td> <td></td> <td>Map and Book</td> <td></td> <td></td> </tr> <tr> <td>Operator Card</td> <td></td> <td></td> <td>Notice cancellations</td> <td>N/A</td> <td></td> </tr> <tr> <td>Well Records</td> <td>SR</td> <td>7/27/2000</td> <td>Bond Status BB/FML</td> <td>SR</td> <td>7/26/2000</td> </tr> <tr> <td>Log Records</td> <td>SR</td> <td>7/31/2000</td> <td>EDP</td> <td>SR</td> <td>7/27/2000</td> </tr> <tr> <td>Production Repts</td> <td>N/A</td> <td></td> <td>Data Base</td> <td>SR</td> <td>7/27/2000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Form or Record	Initials	Date	Form or Record	Initials	Date	Form OGD121	N/A		Map and Book			Operator Card			Notice cancellations	N/A		Well Records	SR	7/27/2000	Bond Status BB/FML	SR	7/26/2000	Log Records	SR	7/31/2000	EDP	SR	7/27/2000	Production Repts	N/A		Data Base	SR	7/27/2000						
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WELL TRANSFER NOTICE

EFFEC MAY 9, 1994, PETRO RESOURCES, INC.

TRANS LONG BEACH NWLBU WELLS

TO PACIFIC ENERGY ~~CORP~~ *Resources*

SEE OGD156 DATED 5-13-94

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1	
Former owner Sun Exploration & Production Co.		Date June 15, 1983	
Name and location of well(s) Sec. 13-4S-13W S.B.B.&M. NWLBU 5-1 (037-09795) NWLBU 8-1 (037-09792) NWLBU 9-3 (037-09791) NWLBU 5-2 (037-00397) NWLBU 8-2 (037-09793) NWLBU 9-4 (037-00392) NWLBU 5-3 (037-09796) NWLBU 8-3 (037-06496) NWLBU 9-5 (037-00142) NWLBU 5-4 (037-09797) NWLBU 8-4 (037-06415) NWLBU 9-6 (037-00393) NWLBU 6-1 (037-09788) NWLBU 8-7 (037-22512) NWLBU 6-2 (037-09789) NWLBU 9-2 (037-13525)			
Description of the land upon which the well(s) is (are) located			
Date of transfer, sale, assignment, conveyance, or exchange May 1, 1983	New owner Petro Resources, Inc. Address 4200 Easton Drive, Suite 16 Bakersfield, CA 94309	Type of organization Corp. Telephone No. 805/323-4118	
Reported by Letter from Sun Exploration & Production Co. dated 5-16-83.			
Confirmed by Letter from Petro Resources, Inc., dated 5-18-83.			
New operator new status (status abbreviation) PA	Request designation of agent Joe D. Rose, same address.		
Old operator new status (status abbreviation) PA	Remarks		
Deputy Supervisor V. F. Gaede		Signature <i>Richard L. Manuel</i>	

OPERATOR STATUS ABBREVIATIONS

PA - Producing Active

NPA - No Potential, Active

PI - Potential Inactive

NPI - No Potential, Inactive

Ab - Abandoned or No More Wells

FORM AND RECORD CHECK LIST

	Form or record	Initials	Date	Form or record	Initials	Date
	Form OGD121	CP	7-7-83	Map and book	137	7/12/83
	Form OGD140	NONE		Notice to be cancelled		
	New well cards	CP	7-7-83	Bond status		
	Well records	CP	7-7-83	EDP files		
	Electric logs	CP	7-7-83	Update		
	Production reports			Conservation Committee		
				L. A. Assessors		

Name change from Sun Oil Co. to SUN EXPLORATION & PRODUCTION CO.

1-1-82, Form 156 dated 1-21-82. See ownership file.

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Long Beach, California

Oct. 4, 1979

Mr. L. B. Carroll, Jr., Agent
Sun Oil Co.
23928 Lyons Ave.
Newhall, CA 91321

DEAR SIR:

Your request dated March 19, 1979, relative to change in designation of well(s) in Sec. 13, T. 4S, R. 13W, S.B.B. & M., Long Beach field, Los Angeles County, District No. 1, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

“ * * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor.”

the proposed change in designation is hereby authorized as follows:

Old Designation	API	New Designation
"Oil Operators" 1 (see)	037-09792	NWLBU 8-1
" " 2	037-09793	NWLBU 8-2
" " 3	037-06496	NWLBU 8-3
" " 4	037-06415	NWLBU 8-4
"Pool" 1	037-09795	NWLBU 5-1
" " 2	037-00397	NWLBU 5-2
" " 3	037-09796	NWLBU 5-3
" " 4	037-09797	NWLBU 5-4
"Amebco" 1	037-09788	NWLBU 6-1
" " 2	037-09789	NWLBU 6-2
"Flood Control" 2	037-13525	NWLBU 9-2
" " 3	037-09791	NWLBU 9-3
" " 4	037-00392	NWLBU 9-4
" " 5	037-00142	NWLBU 9-5
" " 6	037-00393	NWLBU 9-6

*Mag. 137
+ Book
pnc 11/2/79*

RWS:sc

M. G. Mefferd
JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

cc: Update Center
EDP
Conservation Committee

By Richard W. Stahl
Acting Deputy Supervisor
R. A. Ybarra

REPORT OF PROPERTY AND WELL TRANSFER

QGD15h (12-77 CSEB-24)

WORK PERFORMED:

Drill _____ Redrill ☒ Deepen _____
 Plug _____ Alter casing _____
 Water flood _____ Water disposal _____
 Abandon _____
 Other _____

STATUS:

(Date)

Producing _____
 Recomp. prod. ☒ 6-24-67
 Water flood _____
 Water disposal _____
 Abandoned _____
 Other _____
 MAP AND BOOK NC

RECORDS FILED & DATE: Clerk me

Summary (dup.) _____

Log & Core (dup.) _____

☒ History (dup.) 10/4/67☒ E-log (2) 3/63-5902 7/7/67

Radio log _____

D. Survey _____

Other _____

(Check records for signature
and correct name of operator
or well, S.T.R. and field.)

Location _____ Notice states _____

Elevation _____ Notice states _____

Production Reports _____

(If production reports not
received, make notation and
inform Sr. Steno. when rec'd.)

If stimulation or disposal well:
Form 121 _____ Folder _____

Form 19-A

RECORDS & REQUIREMENTS CHECKED: Eng. WJZ

Surface inspection _____

Data needed None

Request records _____

Correct records _____
(Specify)

CARDS NCBOND: #1410633 dated 6-1-67

Hold _____ Reason _____

Release ☒ Date elig. 10-4-67

End premium year _____

5/14/68 Release requested ☒ (Check one)per Diagram Bond superseded _____

Well abandoned _____

FINAL LETTER _____

and
FILE CLEARED _____

Clerk:

F 170 _____

F 165 _____

165A _____

F 150b AG

(2 years 2

on Form

150b)

F 159 _____

F 121 _____

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of California

Well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B. B. & M.

Date September 11,, 19 67 Signed R. S. Ballantyne, Jr.

417 S. Hill St., Los Angeles 628-2156 Title Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

1967

8/8

8/9

Flowed 50 bbl. net 26.2° oil, 0.2% cut, 40-55#/pkr.
Moved in Blackwell & Sunde production rig. Opened bypass on packer and filled hole with salt water. Pulled tubing and packer (laid down 53 joints of 2-7/8" tubing). Go-Western jet perforated four 1/2" holes per foot as follows: 4612-4560', 4489-4449' and 4435-4395'.

8/10

Ran 127 joints of 2-7/8" Armco seal lock tubing with pump shoe and gas anchor - 3960' and 3990', respectively. Ran rods and put well on pump. (Production not separated from other wells until 9/5).

8/12

45 bbl. net.

8/14

50 bbl. net.

9/5

36 bbl. net, 24.1°, 0.5%.

9/12

32 bbl. net, 24°, 0.5%.

9/13

Moved in Blackwell & Sunde production rig. Ran 100 bbl. salt water into annulus. Installed BOPE. Pulled rods and tubing. Go Western found sticky bottom at 5845' and jet perforated four 1/2" holes per foot from 4805-4760'. Ran 139 joints of Armco 2-7/8" seal lock tubing with pump shoe and gas anchor at 4335' and 4365', respectively. Put well on pump.

9/14

56 bbl. gross, 38 bbl. net, 32.2%.

9/17

53 bbl. gross, 47 bbl. net, 11.3%.

9/26

67 bbl. gross, 66 bbl. net, 1.5%, 24.7°.

CASING RECORD AT COMPLETION OF WORK:

(Depths from present KB of 60') T.D. 5925'.

13-3/8" C 763'

8-5/8" C 3163'

5-1/2" C 5924, top 3017' (splice OK). Perfs. 4375' (WSO), 4395-4435', 4449-4489', 4560-4612', 4760-4805', 5712-5730', 5734-5754', 5761-5776'. Plug 5878'.

Sidetracked:

8-5/8" C 4011', top 3194'. Plug 3194' (and open hole up to 3165')

4-3/4" C 5382', top 3810'. Plug 3810'. Perfs: 4494-4534', 4571-4597',

4636-4676', 4811-4841', 4856-4926', 5119-5164', 5174-5241', 5286-5356'.

(6-5/8" L 4414' incl. 60' pfs, C 4350, top 3849', Perfs 4011-4034', 4076-4136', Reperf 4354-4405', cemented off behind 4-3/4".)

4-3/4" & 6-5/8" Perf 4146-4231'

**DIVISION OF OIL AND GAS
RECEIVED**

OCT 4 1967

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

JUL 7 1967

History of Oil or Gas Well

INGLEWOOD, CALIFORNIA

OPERATOR General Exploration Company of Calif. FIELD Long BeachWell No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B.B. & M.Date July 3,, 19 67

Signed

R. S. Ballantyne, Jr.417 S. Hill St., Los Angeles

(Address)

628-2156

(Telephone Number)

Title Vice President

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date	Notes
1967	Note: Depth measurements taken from present K.B. elevation of 60' which is 6' higher than original datum. Ground elevation is 48'.
6/6-7	Moved in, rigged up drilling equipment, installed base flange and B.O.P.E. (Graham Drilling Company).
6/8	Ran 7-5/8" bit on 3-1/2" drill pipe, located top of 4-3/4" liner at 3804' and filled hole with mud. Ran 940' stinger of 2-3/8" tubing on drill pipe and circulated from 4550' to solid fill at 4650'. Laid 100-sack class G cement plug from 4634'. Ran 7-5/8" bit and found cement at 3696' (witnessed by D.O.G.). Tested 8-5/8" casing and B.O.P.E. satisfactorily at 1050# for 15 minutes.
6/9-10	Ran two Yann mills and cut section in 8-5/8" casing from 3163' to 3168'. Ran two Service mills and cut section to 3194'. Opened interval 3163'-3194' to 12-3/4". Ran 310' stinger of 2-7/8" tubing on drill pipe to 3260' and laid 80 sacks of class G cement (including 20% sand) treated with 0.5% CFR-2. Pulled tubing to 2720', back-scuttled, squeezed cement with 1100# and pressure dropping to 950# in 5 minutes.
6/11	Ran 7-5/8" bit and 8-5/8" casing scraper, found cement at 2992' and drilled out to 3165'. Drilled 7-5/8" hole to 3296' with DynaDrill.
6/12-16	Drilled 7-5/8" hole to 4845' using a Dyna Drill from 4299'-4463'. Ran Schlumberger I.E.S. from 4844' to 3163'.
6/16-19	Drilled 7-5/8" hole to 5900'. Ran Schlumberger I.E.S. from 5900' to 4844' and C.D.M. from 5900' to 4000'.
6/20	Drilled 7-5/8" hole to 5925' (T.D.). Ran 2907' (including Burns liner hanger), 68 joints, 5-1/2", 15.5#, J-55 casing on drill pipe. Cemented at 5924' with 579 C.F. of 1:1 class G cement pozmix with 2% gel and 0.5% CFR-2 and 12% salt in mix water. Backscuttled small amount of cement from inside top of 5-1/2" liner. Ran 7-5/8" bit and 8-5/8" casing scraper to top of liner at 3017'.
6/21	Pressure tested casing at 1000# and lap took fluid. Ran Baker shoe squeeze tool on drill pipe and set at 2925'. Squeezed 52 sacks of 75 sacks class G cement mixed into lap at 3017' with a final pressure of 2000#. Ran 7-5/8" bit and 8-5/8" casing scraper, found top of cement at 2940' and drilled out to 3017'.
6/22	Ran 4-3/4" bit and 5-1/2" casing scraper on 2949' of 2-7/8" Armco (seal lok) tubing below drill pipe. Cleaned out cement to 3037' and ran to float collar at 5878'. Satisfactorily pressure tested lap with 1000#. Ran Johnston tester and set packer at 2992' with tail to 3008'. Open 63 minutes. Recovered 10' of drilling fluid. Charts showed tester open. W.S.O. on lap approved by D.O.G. Ran Go-Western cement bond log from 5878' to 3900' and perforated four 1/2" jet holes at 4375'. Ran Johnston tester and set packer at 4342' with tail to 4358'. Open 1 hour. Recovered 45' of drilling fluid. Charts showed tester open. W.S.O. at 4375' approved by D.O.G.
6/23	Ran open end tubing to 5874'. Changed over to 68# salt water. Laid down drill pipe. Ran Go-Western 4" steel carrier and jet perforated four 1/2" holes per foot as follows: 5776'-5761', 5754'-5734' and 5730'-5712'. Ran Guiberson packer on 179 joints of 2-7/8" Armco (seal lok) tubing and set at 5615'. Landed tubing with 16,000# on packer.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS Page 2

History of Oil or Gas Well

OPERATOR General Exploration Company of Calif. FIELD Long Beach

Well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B.B. & M.

Date July 3, 19 67

Signed R. S. Ballantyne, Jr.

417 S. Hill St., Los Angeles

628-2156

Title Vice Resident

(Address)

(Telephone Number)

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

6/24 Removed B.O.P.E. Installed surface equipment. Swabbed well into production at 10:00 A.M. Flowed 74 bbl. net/20 hrs., 81 BD rate, 27.2°, 0.1%, 65 McfD, 20-230#/pkr. 22/64" bean.

6/25 80 bbl. net, 27.2°, 0.1%, 65 Mcf, 20-160#/pkr., 22/64".

6/26 82 bbl. net, 27.2°, 0.1%, 58 Mcf, 20-150#/pkr., 22/64".

6/27 80 bbl. net, 27.2%, 0.2%, 63 Mcf, 20-170# pkr., 22/64".

CASING RECORD AT COMPLETION OF WORK:

(Depths from present KB of 60') T.D. 5925'.

13-3/8" C 763'

8-5/8" C 3163'

5-1/2" C 5924, top 3017' (splice OK). Perfs. 4375' (W80), 5712-5730', 5734-5754', 5761-5776'. Plug 5878'.

Sidetracked:

8-5/8" C 4011', top 3194'. Plug 3194' (and open hole up to 3165')

4-3/4" C 5382', top 3810'. Plug 3810'. Perfs: 4494-4534', 4571-4597', 4636-4676', 4811-4841', 4856-4926', 5119-5164', 5174-5241', 5286-5356'.

(6-5/8" L 4414' incl. 60' pfs, C 4350, top 3849', Perfs 4011-4034', 4076-4136', Reperf 4354-4405', cemented off behind 4-3/4".)

4-3/4" 6-5/8" Perf 4146-4231'.

DIVISION OF OIL AND GAS
RECEIVED

JUL 7 1967

INGLEWOOD, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T 167-576

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
June 28, 1967

DEAR SIR: (037-06415)

Your well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B. B & M.
Long Beach Field, in Los Angeles County, was tested for water shut-off
on June 22, 1967 Mr. R. Johnson, Engineer, designated by the supervisor was present
from 8:00 p.m. to 9:00 p.m. as prescribed by law; there were also present R. Willis, Engineer

Shut-off data: 5 1/2 in. 15.5 lb. casing was -- cemented from 3017' to xx 5925 ft.
on June 20, 1967 in 7-5/8 in. hole with 579 cu. ft. ~~xx~~ of cement
slurry (1:1 pozzmix, 2% gel)

filling ~~calculation~~ behind casing to 3017 ft. below surface.
Casing record of well: 18-5/8" cem. 50'; 13-3/8" cem. 757'; 8-5/8" cem. 4005', window
3163'-3194' sidetracked @ 3165'; 5-1/2" cem. 3017'-5925', perf. 4358' WSO, TD 1st
hole 5379'.

Present depth 5925 ft. cmt. bridge 5925 ft. to 5880 ft. Cleaned out cmt. ---- ft. to ---- ft. for test.
A Johnston tester was run into the hole on 3 1/2 & 2-7/8 in. drill pipe ~~xxxx~~
with ----- ft. of water-mud cushion, and packer -- set at 4342 ft. with tailpiece to 4358 ft.
Tester valve, with 3/4 in. bean, was open for 1 hr. and --- min. During this interval there was a
light blow for 2 minutes & no blow thereafter.

Mr. Willis reported ~~x~~ that the 5-1/2" casing was jet-perforated
with four, 3/8" holes at 4358'.

THE ENGINEER NOTED:

1. When the drill pipe was removed, 45' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

THE 5-1/2" SHUT-OFF AT 4358' IS APPROVED.

RJ:nw

cc Company

E. R. MURRAY-AARON

State Oil and Gas Supervisor

By

Wm. C. Bailey Deputy

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 167-575

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
June 28, 1967

DEAR SIR:

(037-06415)

Operations at well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.E. B & M.
Long Beach Field, in Los Angeles County, were witnessed
on June 22, 1967. Mr. S. Cordova, Engineer, representative of the supervisor was present
from 11:30 a.m. to 12:15 p.m. There were also present R. Willis, Engineer &
C. D. Martin, Drilling Foreman

Present condition of well: 18-5/8" cem. 50'; 13-3/8" cem. 757'; 8-5/8" cem. 4005' window
3163'-3194', sidetracked @ 3165'; 5-1/2" cem. 3017'-5925'. TD 5925'. TD 1st hole 5379'.

The operations were performed for the purpose of demonstrating the effectiveness of the seal
between the 8-5/8" and 5-1/2" casings.

Mr. Willis reported:

1. A window was milled in the 8-5/8" casing from 3163' to 3194' and the hole was opened to 13" in that interval.
2. On June 10, 1967, 80 sacks of cement mixed with 20% sand was pumped into the hole through 3-1/2" drill pipe hanging at 3260'.
3. Cement was drilled out of the hole from 2992' to 3165'.
4. A 7-5/8" hole was redrilled from 3165' to 5925'.
5. On June 20, 1967, 2908' of 5-1/2", 15.5 lb. casing was cemented from 3017' to 5925' with 579 cubic feet of cement slurry (1:1 pozzmix, 2% gel), filling behind the 5-1/2" casing to 3017'.
6. Excess cement was backscuttled from above the 5-1/2" casing.
7. On June 21, 1967, the annulus between the 8-5/8" and 5-1/2" casings was recemented with 75 sacks of cement of which 50 sacks was squeezed away under a final pressure of 2000 Psi.
8. The hole was cleaned out to the float collar at 5880'.
9. A Johnston tester was run into the hole on 3-1/2" drill pipe, and packer set at 2993', with tailpiece to 3008'.
10. The tester valve with 3/4" bean was open for 1 hr. During this interval there was a light blow for 3 minutes and no blow thereafter.

THE ENGINEER NOTED:

1. When the drill pipe was removed, 10' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

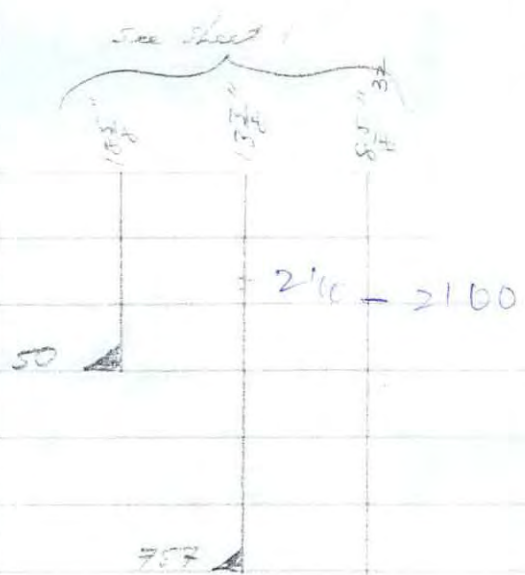
THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED and indicate that no fluid has access to the well from the annulus between the 8-5/8" and 5-1/2" casings.

SC:nw

cc Company

E. R. MURRAY-AARON
State Oil and Gas Supervisor

By W. C. Bailey Deputy



5 1/2" 15.5" 2100'

BFW 2250'
 upper CUB (A) 2475'
 (C) upper WILBUR 3880'
 ALAMITOS Lower 3882'
 BROWN 4400'

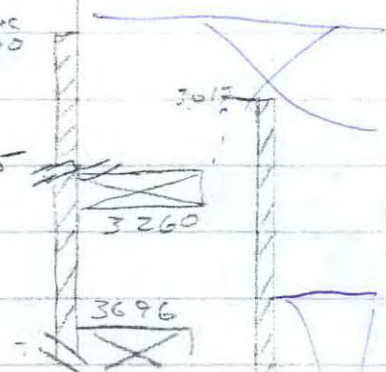
PETES 2445-45 2150'
 (3) = W - 2250
 W42 - 2475

plug fr. 5878 - 2817

S.T. @ 3165

CEM @ 3260, 80 ft
 drilled out to 3165 for S.T.

NEED 2817
 3017 T.O.L. 3017 (6/20/67)



3480'

ALAM. 3882

W50 @ 4353

BROWN 4400

WITS: 5712 - 5776 6/23/67

6/20/67 CEM 5794 5925



Flow collar plug @ 5878 6/22/67

Ref in

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 167-526

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013

Inglewood, Calif.
June 14, 1967

Agent for GENERAL EXPLORATION CO. OF CALIF.

DEAR SIR:

(037-06415)

Operations at well No. "Oil Operators" 4, Sec. 13, T. 4 S, R. 13 W, S.B. B & M.
Long Beach Field, in Los Angeles County, were witnessed
on June 8, 1967. Mr. M. Mefferd, Engineer, representative of the supervisor was present
from 9:30 p.m. to 10:30 p.m.. There were also present C. Martin, Drilling Foreman &
L. Saxton, Driller

Present condition of well: 18-5/8" cem. 50'; 13-3/8" cem. 757'; 8-5/8" cem. 4005', WSO;
6-5/8" ld. 3843'-4408', cp 4344', perf. 4005'-4028', 4070'-4130' & 4140'-4225';
4-3/4" cem. 3804'-5376', perfs. 4140'-4225', 4488'-4528', 4565'-4591', 4630'-4670',
4805'-4835', 4850'-4920', 5113'-5158', 5168'-5235' & 5280'-5350'. TD 5379', plugged
w/cem. 5376'-5361' & 4634'-3696'.

The operations were performed for the purpose of testing the location and hardness of a cement
plug placed from 4634' to 3696' in the process of plugging back to redrill.

Mr. Martin reported:

1. The hole was cleaned out to solid fill at 4650'.
2. On June 8, 1967, 100 sacks of cement was pumped into the hole through 2-3/8" tubing hanging at 4634', filling to 3696'.

THE ENGINEER NOTED THAT the cement plug at the reported depth of 3696' supported 1/4 of the weight of the drill pipe.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 3696' ARE APPROVED.

MM:nw

cc Company

E. R. MURRAY-AARON

State Oil and Gas Supervisor

By

Deputy

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 167-601

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
 Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
June 6, 1967

DEAR SIR:

(037-06415)

Your proposal to redrill Well No. "Oil Operators" 4,
 Section 13, T. 4 S, R. 13 W, S.B. B. & M., Long Beach Field, Los Angeles County,
 dated June 2, 1967, received June 2, 1967, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.
 Plugged w/cem. 5376'-5361'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 5379'
2. Complete casing record, including plugs:
 13-3/8" C 757'
 8-5/8" C 4005' OK
 4-3/4" C 5376', top 3804', Pfs. 4488-4528', 4565-4591', 4630-4670', 4805-4835',
 4850-4920', 5113-5158', 5168-5235' and 5280-5350'.
 Pl. 5365'. Sand bridge 4650'.
 (6-5/8" L 4408' incl. 60' pfs. C 4344', top 3843', Pf 4005-4028', 4070-4130';
 Repf 4348-4399', cemented off behind 4-3/4".)
 4-3/4" & 6-5/8" PF 4140-4225'.
3. Last produced

10/14/64	2	546	-
(Date)	(Oil, B/D)	(Water, B/D)	(Gas) "

PROPOSAL

"The proposed work is as follows:

1. Move in drilling equipment, install B.O.P.E. and fill hole with mud.
2. Lay cement plug from top of sand at approximately 4650' back to 3700'
 (top 4-3/4" liner at 3804'). Lock top of plug. Pressure test 8-5/8" casing
 and B.O.P.E. with 1000#.
3. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 13",
 lay cement plug from 100' below section back above top of window and level off
 plug 5' into section.
4. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 4800'.
5. Run and cement 5-1/2" liner, effect W.S.O. at lap of 8-5/8" casing and above pro-
 ductive horizon.
6. Complete well."

DECISION

THE PROPOSAL IS APPROVED PROVIDED:

1. Fluid consistent with good drilling practice shall be used, and the column of fluid
 maintained at all times to the surface, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be installed and maintained in operating
 condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
 - a. The location and hardness of the cement plug at 3700'.
 - b. A test, after cleaning out below the top of the liner to demonstrate that no fluid
 has access to the well from the annulus between the 8-5/8" and 5-1/2"
 casings.

E. R. MURRAY-AARON, State Oil and Gas Supervisor

[Signature]

Deputy Dated

18755-705 3-64 501
 BLANKET BOND A test of the effectiveness of the 5 1/2" shut-off. WLI:mw Bond No. 1410633, 6/1/67

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Los Angeles Calif. June 2 1967

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or altering casing~~ at Well No. "Oil Operators" 4
(Cross out unnecessary words)

Sec. 13, T. 4S, R. 13W, S.B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 5379'

2. Complete casing record, including plugs:

13-3/8" C 757'

8-5/8" C 4005' OK

4-3/4" C 5376', top 3804', Pfs. 4488-4528', 4565-4591', 4630-4670',
4805-4835', 4850-4920', 5113-5158', 5168-5235' and 5280-5350'.
Pl. 5365'. Sand bridge 4650'.

(6-5/8" L 4408' incl. 60' pfs. C 4344', top 3843', Pf 4005-4028', 4070-4130';
Repf 4348-4399', cemented off behind 4-3/4".)

4-3/4" & 6-5/8" Pf 4140-4225'.

3. Last produced. 10/14/64 2 546 -
(Date) (Oil, B/D) (Water, B/D) (Gas)

The proposed work is as follows:

1. Move in drilling equipment, install B.O.P.E. and fill hole with mud.
2. Lay cement plug from top of sand at approximately 4650' back to 3700' (top 4-3/4" liner at 3804'). Locate top of plug. Pressure test 8-5/8" casing and B.O.P.E. with 1000#.
3. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 13", lay cement plug from 100' below section back above top of window and level off plug 5' into section.
4. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 4800'.
5. Run and cement 5-1/2" liner, effect W.S.O. at lap of 8-5/8" casing and above productive horizon.
6. Complete well.

Redrill			FORMS	
MAP	MAP BOOK	CARDS	BOND	
			No. 1410633 6-1-67	114 121 a2 a2

417 S. Hill St., Los Angeles 90013

(Address)

628-2156

(Telephone No.)

GENERAL EXPLORATION COMPANY OF CALIFORNIA

(Name of Operator)

By R. S. Ballantyne, Vice President

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or County **Long Beach** District **1**
Former Owner: **Union Oil Co. of California** Date **January 17, 1961**
Description of Property **Sec. 13, T. 4 S., R. 13 W., S. 2. S. & 11.**

List of Wells **"Oil Operators" 1, "Oil Operators" 2, "Oil Operators" 3 and "Oil Operators" 4. ("Oil Operators" 1, 1010; other wells are active)**

Date of Transfer **January 1, 1961**
New Owner: **General Exploration Co. of California**
Address: **730 Subway Terminal Building, 417 South Hill Street, Los Angeles 13, Calif.**

Telephone No.

Type of Organization **Corporation**
Reported by: **Union Oil Co. of California (letter of January 6, 1961)**
Confirmed by: **General Exploration Co. of California (letter of January 11, 1961)**
New Operator New Status **PA**, Old Operator New Status **PA**
Request designation of agent **Lo**

Remarks:

cb

CC- **Mr. D. H. Nasser**
Fred. Dept.
Conservation Committee

	INITIALS	DATE
Form 121		
New Well Cards		
Well Records		
Electric Logs		
Production Reports		
Map and Book		
Form 148		
Notice to be cancelled		


Deputy Supervisor

LEGEND
PA—Producing Active
NPA—Non Potential Active
PI—Potential Inactive
NPI—Non Potential Inactive
Ab—Abandoned or No More Wells
NOTE—If Transfer Does Not Change Overall Status Enter "No Change"

Form 10

CLERK

: 13

RECEIPT FOR

Date Received 11-6-59 Form 100 101 103 : New Well RecordsElec. Log Radio Log : Subsequent WorkDirect. Surv. Other Data None : Well Summary Location : (100) : Drillers Log : (101) Elevation Clerk Scott : Core Record Prod. Repts. Clerk : (101) COMPLETED PRODUCING ON 8-27-59
ENGINEERABANDONED ON : Elec. Log BOND Blanket Release Date Elig. 150b : Other End Prem. year Release Requested Superseded : Aband. : Redrill HOLD BOND Reason : Deepen : Plug Data Needed : Alter Csg. Final Letter Eng. RC : Abandon

DIVISION OF OIL AND GAS
UNION OIL COMPANYNOV 6 1959
CASING RECORDWELL NO. Oil Operators #4Long beach

(FIELD)

Los Angeles

(COUNTY)

SEC. 13, T. 4-S, R. 13-W S.B. B. & M.History of Oil or Gas Well
REPAIR REPORTPortable Hoist-Contract
(TOOLS)

August 27, 1959

(PERIOD ENDING)

INGLEWOOD, CALIFORNIA

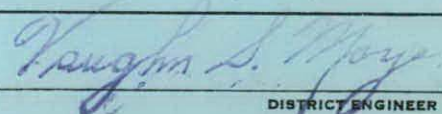
See below

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1959			
				CHARGE: LR-AFE 56900 Job 528. PROPOSED WORK: Add perforations in the Alamitos Zone. PRODUCTION BEFORE REPAIR: Idle ZERO POINT for this Job: 8.5' above pad.
				CASING RECORD AT START OF WORK: 13-3/8" C 757' 8-5/8" C 4005' OK 1572' 4-3/4" C 5376'. Pfs 4488-4528', 4565-4591', 4630-4670', 4805-4835', 4850-4920', 5113-5158', 5168-5235', 5280-5350'. (565' 6-5/8" L 4408' incl. 60' pfs. Gr 4344'. Pf 4005-4028', 4070-4130'; Reprf 4348-4399', cemented off behind 43")
				CASING RECORD AT COMPLETION OF WORK: 13-3/8" C 757' : 8-5/8" C 4005' OK 1572' 4-3/4" C 5376'. pfs 4488-4528', 4565-4591', 4630-4670', 4805-4835', 4850-4920', 5113-5158', 5168-5235', 5280-5350'. (565' 6-5/8" L 4408' incl. 60' pfs. Gr 4344'. Pf 4005-4028', 4070-4130'; Reprf 4348-4399', cemented off behind 43") 4-3/4" & 6-5/8" perms., 4140-4225'.
2	8-25	5379	Plug 5361	Contractor moved in and rigged up. Pulled rods and pump. Pulled tubing. Ran in with 7-1/2" impression block to top of 4-3/4" liner at 3807'. Ran 3-5/8" impression block to 4250'. Installed blow-out preventer.
2	8-26	"	"	Perforated 4-3/4" and 6-5/8" liners from 4225-4140' with two 1/2" jet holes per foot and two 1/2" bullets per foot. Fluid level (mud) rose from 3600' at start to 1400' at end. Light blow while shooting. Ran in with 2-7/8" Cavins sand pump and bailed at 5331'. Started running tubing.
2	8-27	"	"	Ran in and landed tubing with gas anchor at 4200'. Ran rods and pump. Put well on production. Contractor moved out.

NAMES OF DRILLERS/HEAD WELL PULLERS:

Terminal Drilling Co. - Contractor



DISTRICT ENGINEER

DIVISION OF OIL AND GAS

UNION OIL COMPANY

CASING RECORD

Oil Operators #4
WELL NO. _____
Long Beach
(FIELD)
Los Angeles
(COUNTY)
SEC. 13 T. 4-S R. 13-W S.B. B. & M.

History of Oil or Gas Well
REPAIR REPORT

Port. Moist - Contract

(TOOLS)

September 24, 1959

(PERIOD ENDING)

13-3/8" C 757'; 8-5/8" C 4005' ON
1572' 4 1/2" C 5376'. Lf 4488-4528
4565-4591', 4630-4670, 4805-4825
4850-4920, 5113-5158, 5168-5235'
5280-5350'
(565' 6-5/8" L 4408' incl. 60' pfs
(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1959	5379	Plug 5361	CF 4344'. LF 4005-4028, 4070-4130'; repfs 4348-4399', contd off behind 4-3/4" 4-3/4" & 6-5/8" pfs 4340-4225'.
PRODUCTION DATA				
	Hrs	Gross	Net	Cut Grav. MCF Remarks
8-28	24	64	0	100.0
8-29	24	104	0	100.0
8-30	24	124	0	100.0
8-31	24	103	0	100.0
9-1	24	120	0	100.0
9-2	24	107	0	100.0
9-3	24	120	0	100.0
9-4	24	80	0	100.0
9-5	24	100	0	100.0
9-6	24	95	0	100.0
9-7	24	103	0	100.0
9-8	24	91	0	100.0
9-9	24	101	0	100.0
9-10	13	325	0	100.0
9-11	6	85	0	100.0
9-12	11	115	0	100.0
9-13	24	222	0	100.0
9-14	24	224	22	90.0
9-15	24	316	35	89.0
9-16	24	246	27	89.0 23.2 0
9-17	24	270	27	90.0 23.2 Tr.
9-18	-	Well down due to bad leak in the oil line.		
9-19	-	"	"	" " " " " "
9-20	-	"	"	" " " " " "
9-21	17	175	18	90.0 23.2 0
9-22	24	252	25	90.0 23.2 10
9-23	24	251	25	90.0 23.2 4
9-24	24	377	38	90.0 23.2 4

DIVISION OF OIL AND GAS
RECEIVED

NOV 6 1959

INGLEWOOD, CALIFORNIA

Pulled rods.
Pulled tubing. Ran tbg & rods.
Pump stuck.

rjh

NAMES OF DRILLERS/HEAD WELL PULLERS:
Terminal Drilling Co. - Contractor

Vaughn S. Meyer
DISTRICT ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONSNo. P. 159-744Mr. C. F. Bowden
P. O. Box 7600
Los Angeles 54, California
Agent for UNION OIL COMPANY OF CALIFORNIAInglewood 3, Calif.
September 1, 1959

DEAR SIR:

Your proposal to alter casing Well No. "Oil Operators" 4,
Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
dated August 25, 1959 received August 28, 1959 has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.

18-5/8" cem. 50'; 8-5/8" cem. 4005', W.S.O.; 6-5/8" perf. 4348'-4408', plugged with cement 5376'-5361'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 5379'
Plug 5361'
2. Complete casing record.
13-3/8" C 757'
8-5/8" C 4005' OK
565' 6-5/8" L 4408' inc. 60' perf.; CP 4344'; Pf. 4005-4028, 4070-4130,
4348-4399'-----Cemented off behind 4-3/4".
1572' 4-3/4" C 5376', plug 5361'; Pf 4488-4525, 4565-4591, 4630-4670,
4805-4835, 4830-4920, 5113-5235, 5280-5350'.
3. Last produced. January, 1958 2 21.1 75.0%
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL

"The proposed work is as follows:

1. Pull rods and tubing. Install blow-out preventer equipment.
2. Check condition of casing.
3. Bullet and jet perforate 4-3/4" and 6-5/8" casings with four holes per foot from 4140-4225'.
4. Run tubing, pump and rods.
5. Test well on production."

DECISION

THE PROPOSAL IS APPROVED.

RC:yk

cc- Mr. Vaughn S. Moyer

E. H. MUSSER, State Oil and Gas Supervisor

Blanket Bond

By E. H. Mussers, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 25 1959
INGLEWOOD, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Santa Fe Springs

Calif.

August 25,

19 59

DIVISION OF OIL AND GAS

Inglewood

Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13

, T.

4-S

, R.

13-WS.B.

B. & M.

Long Beach

Field,

Los Angeles

County.

The present condition of the well is as follows:

1. Total depth. 5379'Plug 5361'

2. Complete casing record.

13-3/8" C 757'8-5/8" C 4005' OK565' 6-5/8" L 4408' inc. 60' perf.; CP 4344'; Pf. 4005-4028, 4070-4130, 4348-4399' ---- Cemented off behind 4-3/4".1572' 4-3/4" C 5376', plug 5361'; Pf 4488-4525, 4565-4591, 4630-4670, 4805-4835, 4830-4920, 5113-5235, 5280-5350'.

3. Last produced.

January, 1958221.175.0%

(Date)

(Net Oil)

(Gravity)

(Cut)

The proposed work is as follows:

1. Pull rods and tubing. Install blow-out preventer equipment.
2. Check condition of casing.
3. Bullet and jet perforate 4-3/4" and 6-5/8" casings with four holes per foot from 4140-4225'.
4. Run tubing, pump and rods.
5. Test well on production.

MAP

MAP BOOK

CARDS

BOND

FORMS

114

121

Union Oil Co. of Calif.

(Name of Operator)

By

Vaughn S. Moyer, Division Engr.

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

COMPLETED PRODUCING ON 8-27-59

ABANDONED ON

STENOGRAPHER

Date Received 2-26-49 Form 100 101 103Elec. Log Radio Log Direct. Surv. Other Data History matterLocation
CasingElevation Steno. 80

ENGINEER

BOND Blanket Release Date Elig. 150b End Prem.Yr. Release Requested Superseded Aban. HOLD BOND Reason
Data Needed 1 Final Letter Eng. SMR
3-1-49

Note: This work done without filing notice.

STENOGRAPHER

Date Received 12-2-48 Form 100 101 103 Elec. Log. Radio Log Direct. Surv. Other Data List of all casesLocation Elevation Steno. z

ENGINEER

BOND Blanket Release Date Elig. 150b End Prem. Yr. Release Requested Superseded Aban. HOLD BOND Reason Data Needed None Final Letter Eng. SMR12-6-48

DIVISION OF OIL AND GAS

UNION OIL COMPANY

History of Oil or Gas Well

REPAIR REPORT

Portable Hoist - Contract

(TOOLS)

Oct. 30, 1948

(PERIOD ENDING)

13-3/8" O 75' CASING RECORD

8-5/8" O 4005' O.K.

1572' 4-3/4" O 5376', pf 4630-70'

4805-35', 4850-4920', 5113-58'

5165-5235', 5260-5350'

(565' 6-5/8" L 4408' inc. 60' pf,

O.P. 4344' behind 4-3/4")

(NOTE INEFFECTIVE CASING)

WELL NO. Oil Operators #4

Long Beach

(FIELD)

Los Angeles

(COUNTY)

SEC. 13, T. 4-S, R. 13-W S.B. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																																		
	1948			LOS ANGELES, CALIFORNIA																																																																		
				Proposed Work: Perforate interval from 4805' to 4835' with two $\frac{1}{2}$ " holes per foot.																																																																		
				Production: 7 B/D net - 18.7% - 21.5°																																																																		
1	10-18	5379	Plug 5361	California Production Service - Contractors, moved in and pulled rods, pump and tubing. Ran 2-7/8" Gavins sand pump bailer to 5350'.																																																																		
1	10-19	"	"	Cleaned out with ditto bailer to 5360'. Ran 3-3/4" impression block to 5130'. Indicated rough perforation holes. Ran 3-1/2" impression block to 5360'. O.K. Ran in and shot 4-3/4" casing at intervals from 4630-4670', 4805-4835' with 140 1/2" McCullough bullets, using 3-1/2" o.d. x 10' (20-shot) gun. Checked top of 4-3/4" casing at 3802'. Fluid level at start 3590'. Fluid level at finish 3520'. Evidence of fine sand and mud on guns and sand line during shooting from 4630-4670'. Light gas blow during entire period of shooting.																																																																		
1	10-20	"	"	Ran tubing to 4600'. Put well on production.																																																																		
				<u>PRODUCTION DATA</u>																																																																		
				<table><tr><th>Hours</th><th>Gross</th><th>Net</th><th>Cut</th><th>Grav.</th><th>Remarks</th></tr><tr><td>10-21</td><td>28</td><td>26</td><td>8.0</td><td>21.5</td><td></td></tr><tr><td>10-22</td><td>20</td><td>18</td><td>10.0</td><td></td><td></td></tr><tr><td>10-23</td><td>15</td><td>14</td><td>6.0</td><td></td><td></td></tr><tr><td>10-24</td><td>18</td><td>17</td><td>5.0</td><td></td><td></td></tr><tr><td>10-25</td><td>15</td><td>14</td><td>6.0</td><td></td><td></td></tr><tr><td>10-26</td><td>15</td><td>14</td><td>6.0</td><td></td><td></td></tr><tr><td>10-27</td><td>7</td><td>6</td><td>14.0</td><td></td><td></td></tr><tr><td>10-28</td><td>6</td><td>6</td><td>-</td><td></td><td></td></tr><tr><td>10-29</td><td>7</td><td>6</td><td>14.0</td><td></td><td></td></tr><tr><td>10-30</td><td>6</td><td>6</td><td>-</td><td></td><td></td></tr></table>	Hours	Gross	Net	Cut	Grav.	Remarks	10-21	28	26	8.0	21.5		10-22	20	18	10.0			10-23	15	14	6.0			10-24	18	17	5.0			10-25	15	14	6.0			10-26	15	14	6.0			10-27	7	6	14.0			10-28	6	6	-			10-29	7	6	14.0			10-30	6	6	-		
Hours	Gross	Net	Cut	Grav.	Remarks																																																																	
10-21	28	26	8.0	21.5																																																																		
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10-30	6	6	-																																																																			
				<table><tr><th>MAP</th><th>MAP BOOK</th><th>CARDS</th><th>BOND</th><th colspan="2">FORMS</th></tr><tr><td></td><td></td><td></td><td></td><td>114</td><td>121</td></tr></table>	MAP	MAP BOOK	CARDS	BOND	FORMS						114	121																																																						
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				114	121																																																																	

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121

NAMES OF DRILLERS/HEAD WELL PULLERS: Calif. Prod. Serv. - Contr.

John R. Innes

DISTRICT ENGINEER

DIVISION OF OIL AND GAS

UNION OIL COMPANY

History of Oil or Gas Well

REPAIR REPORT

Portable Hoist - Contract

(TOOLS)

Dec. 9, 1948

(PERIOD ENDING)

CASING RECORD

13-3/8" C 757'; 8-5/8" C 4005'
O.K.s: 1572' 4-3/4" C 5376', pf.
4488-4528', 4565-4591', 4630-4670'
4805-4835', 4850-4920', 5113-58'
5168-5235, 5280-5350'; (565'
6-5/8" L 4408' inc. 60' pfs.,
C.P. 4344' behind 4-3/4")

(NOTE INEFFECTIVE CASING)

WELL NO. 011 Operator #4
Long Beach
(FIELD)
Los Angeles
(COUNTY)
SEC. 13 T. 4-S R. 13-W S.E. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																							
	<u>1948</u>																																																										
				Proposed Work: Perforate interval from 4565' to 4591' with two 1/2" holes per foot. Test on the pump. Productions 6 B/D net - 11.4% out																																																							
2	11-23	5379	Plug 5361	Pulled rods, pump and tubing. Made up 2-5/8" Carins sand pump bailer																																																							
2	11-24	5379	"	Checked bottom with bailer at 5360'. Gun perforated 4-3/4" casing from 4488-4528', 4565-4591' with 132' McCullough 1/2" bullets using 3-1/2" o.d. x 20 shot gun (120 grain loads). Had strong gas blow after shooting first gun. Blow continued throughout shooting. Unable to check fluid level with gun. Guns contained some sand. Casing pressure 225# while shooting. Used 8.5' above concrete pad as zero measurement.																																																							
3	11-25	5379	"	Checked bottom at 5360'. Unable to determine fluid level. Ran tubing, pump and rods. Contractors moved out.																																																							
1	11-26 to 11-29	5379	"	Installed gas trap																																																							
				PRODUCTION DATA																																																							
				<table><tr><th>Hours</th><th>Gross</th><th>Net</th><th>Out</th><th>Remarks</th></tr><tr><td>16</td><td>12</td><td>11</td><td>21.5</td><td></td></tr><tr><td>12-1</td><td>0</td><td>-</td><td>-</td><td>Pump change.</td></tr><tr><td>12-2</td><td>0</td><td>-</td><td>-</td><td></td></tr><tr><td>12-3</td><td>0</td><td>-</td><td>-</td><td>Bailed 5315-5360'</td></tr><tr><td>12-4</td><td>0</td><td>-</td><td>-</td><td>Bailing</td></tr><tr><td>12-5</td><td>0</td><td>-</td><td>-</td><td>Bailing</td></tr><tr><td>12-6</td><td>24</td><td>47</td><td>28</td><td>40.0</td></tr><tr><td>12-7</td><td>24</td><td>8</td><td>5</td><td>40.0</td></tr><tr><td>12-8</td><td>24</td><td>12</td><td>7</td><td>40.0</td></tr><tr><td>12-9</td><td>24</td><td>9</td><td>5</td><td>40.0</td></tr></table>	Hours	Gross	Net	Out	Remarks	16	12	11	21.5		12-1	0	-	-	Pump change.	12-2	0	-	-		12-3	0	-	-	Bailed 5315-5360'	12-4	0	-	-	Bailing	12-5	0	-	-	Bailing	12-6	24	47	28	40.0	12-7	24	8	5	40.0	12-8	24	12	7	40.0	12-9	24	9	5	40.0
Hours	Gross	Net	Out	Remarks																																																							
16	12	11	21.5																																																								
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MAP	MAP BOOK	CARDS	BOND	FORMS																																																							
				114 121																																																							

RECEIVED
FEB 26 1949
LOS ANGELES, CALIFORNIA

NAMES OF DRILLERS/HEAD WELL PULLERS: CALIF. PROD. SERV. - Contr.

John R. Giraser
DISTRICT ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-45682

Los Angeles 15, Calif. October 5, 19 48

Mr. W. S. Eggleston

Los Angeles 14, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to alter casing Well No. "Oil Operators" 4, Section 13, T. 4 S., R. 13 W., S. B. B. & M., Long Beach Field, Los Angeles County, dated Sept. 30, 19 48, received Oct. 1, 19 48, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' - Plug 5365'

18-5/8" C 50'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408' inc. 60' perf., C.P. 4344' - drilled through bottom.

(Perf. & cmtd. 4005-4028', 4070-4130')

1572' 4-3/4" C 5376', perf. 4850-4920', 5113-5158', 5168-5235', 5282-5350'

2. Last produced	Aug. 1948	8 B/D Ave.	21.5°	15.5%
	(Date)	(Net Oil)	(Gravity)	(Cut)"

PROPOSAL:

"The proposed work is as follows:

1. Add perforations with two 1/2 bullet perforations per foot in the intervals from 4630-4672', 4805-4835'.
2. Test on production."

DECISION:

THE PROPOSAL IS APPROVED.

SHR:OH

cc- John R. Fraser
Long Beach

Records Filed	
100	
101	
103	12-2-48
E. Log.	

See also history of attempts.

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. Musser

Deputy

Blanket bond.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
OCT 1 - 1948
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Whittier, Calif. Sept. 30, 19 48

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S. B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' - Plug 5365'

18-5/8" C 50'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408' inc. 60' perf., C.P. 4344' - drilled through bottom.

(perf. & cmtd. 4005-4028', 4070-4130')

1572' 4-3/4" C 5376', perf. 4850-4920', 5113-5158', 5168-5235', 5282-5350'

2. Last produced Aug. 1948 8 B/D Ave. 21.5° 15.5%
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Add perforations with two 1/2" bullet perforations per foot in the intervals from 4630-4672', 4805-4835'.
2. Test on production.

alter casing

				FORMS	
MAP	MAP BOOK	CARDS	BOND	114	121
			<i>Blanket</i>	<i>pf</i>	<i>pf</i>

UNION OIL COMPANY OF CALIF.

(Name of Operator)

By

John R. Fraser
John R. Fraser, Division Engr.

Address Notice to Division of Oil and Gas in District Where Well is Located

STENOGRAPHER

Forms ed 103Date Rec'd. 11-14-45Electric Log Location Elevation

ENGINEER

Form Needed Map Correction Form 150b (Date of Release)At Request of Operator BlanketBecause Abandoned Because Request by Oper. Remarks sub work report ofalter casingERma

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
NOV 14 1945
LOS ANGELES, CALIFORNIA

OPERATOR Union Oil Company of California FIELD Long Beach

Well No. Oil Operators 4, Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

Signed Henry E. Winter

Date November 8, 1945 Title Division Engineer.
(President, Secretary or Agent)

Use this form in reporting all important operations at the well, together with the dates thereof, in the order of their performance. Such operations include drilling, redrilling, deepening, plugging, or altering casing as by perforating, shooting, or pulling. Include in your report size of hole drilled, redrilled, or deepened; size, weight and length of casing landed, cemented, or removed, amount and location of perforations; number of sacks of cement used in cementing or plugging operations, number of feet of cement drilled out of casing, location of top and bottom of cement plugs. If the well was dynamited, give date, dimensions and weight of all shots. If tests were made give interval tested and results of tests, such as, amount and nature of fluids recovered.

Date

Casing Record at Beginning of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
565' 6-5/8" L 4408', inc. 60' perf.
C.P. 4344' - Reperf. 4348-4399'
1572' 4-3/4" C 5376'
Perf. and reperf. 5113-5158, 5168-5235
and 5280-5350'

Casing Record at End of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
565' 6-5/8" L 4408', inc. 60' perf.
C.P. 4344' - Reperf. 4348-99
1572' 4-3/4" C 5376'
Perf. and reperf. 4850-4920,
5113-5158, 5168-5235 and 5280-5350'

Date	Depth	Eff. Depth	Remarks
1945			
8-16	5379	Plug 5361	Pulled rods and tubing. Rigged up to add perforations.
8-17		C.O. 5361	Cleaned out sand from 5355 to 5361'. Fluid level 4410'.
8-18			Perforated 4-3/4" casing from 4850 to 4920' with 138 Lane-Wells 1/2" bullets.
8-22			Ran rods and 2-1/2" upset tubing to 5029' over-all. Put well to pumping.

Production Data:

	Hours	Gross	Net	Grav.	Cut
8-23	24	21	16	26.2	13.1
8-25	24	21	16	26.2	13.1
8-27	24	19	16	26.2	13.1
8-29	24	21	18	26.2	13.1
8-31	24	17	15	26.2	13.1

MAP	MAP BOOK	CARDS	BOOKS	FORMS	
				114	121

DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

AT 732

Los Angeles
Union Oil Co. of Calif.

Calif.

19 ~~10-10~~ 44

Name of Operator

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13

T. 4S R. 13W, SB B. & M., as herewith enumerated by well numbers.

Logs

Long Beach

History

Core record

Subsequent work

- Oil operators - 4

RECEIVED
OCT 20 1944
SAN FRANCISCO, CALIF.

10-4-44

R. D. BUSH, State Oil and Gas Supervisor

FORM 127

36195 7-44 3500 TRIP SPO

By

E. S. Musser

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-41022

Los Angeles 14,

Calif.

August 14, 1945

Mr. W. S. Eggleston

Los Angeles 14,

Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to alter casing Well No. "Oil Operators" 4,
Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
dated Aug. 6, 1945, received Aug. 10, 1945, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

Records in addition to, or at variance with those shown in the notice:

The 6-5/8" casing is perforated 4348'-4408', 4130'-4070', and 4028'-4005',
(sealed off by 4-3/4" casing).

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' Plug 5361'

13-3/8" Cmtd. 757'

8-5/8" Cmtd. 4005' OK

1572' 4-3/4" Cmtd. 5376' Perf. 5113-5158', 5168-5235', 5280-5350'.

(565' 6-5/8" L 4408' inc. 60' perf. CP 4344' - Drilled through)

Production has not been satisfactory since reperforating in August, 1944.

2. Last produced <u>June, 1945</u>	<u>172</u>	<u>26.2°</u>	<u>26.2%</u>	<u>29 days</u>
(Date)	(Net Oil)	(Gravity)	(Cut)"	

PROPOSAL:

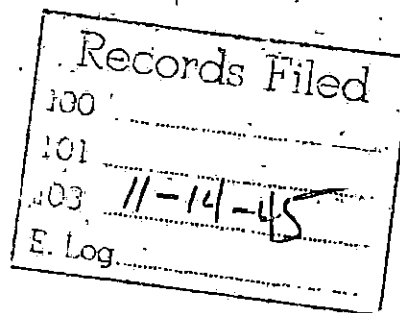
"The proposed work is as follows:

1. Leave present perforations (RS-T) open and add perforations 4850-4920'.
2. Test on production."

DECISION:

THE PROPOSAL IS APPROVED.

ERMA:OH



cc- P. A. W.
H. E. Winter
Long Beach

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. Meuser

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
AUG 10 1945
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs, Calif. August 6, 19 45

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.

Total Depth 5379' Plug 5361'
13-3/8" Cmtd. 757'
8-5/8" Cmtd. 4005' OK
1572' 4-3/4" Cmtd. 5376' Perf. 5113-5158', 5168-5235', 5280-5350'.
(565' 6-5/8" L 4408' inc. 60' perf. CP 4344' - Drilled through)

Production has not been satisfactory since reperforating in August, 1944.

2. Last produced June, 1945 172 26.2° 26.2% 29 days
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Leave present perforations (RS-T) open and add perforations 4850-4920'.
2. Test on production.

alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS
			Blanket 99071	114 121
				End End

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

cc: P.A.W.

By

Henny E. Winter
Division Engineer

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STENOGRAPHER

Forms Filed 102

Date Rec'd. 10-4-44

Electric Log ✓

Location

Elevation ✓

ENGINEER

Form Needed none

Map Correction none

Form 150b (Date of Release)

At Request of Operator

Because Abandoned

Because Request by Oper.

Remarks Rec. for Subsequent

work report YCH

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

13
DIVISION OF OIL & GAS
RECEIVED

OCT 4 1944

LOS ANGELES, CALIFORNIA

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated July 18, 1941, was filed.

SIGNED _____

Henry E. Winter

Date September 27, 1944

Title Division Engineer

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

Casing Record at Beginning of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
1572' 4-3/4" C 5376' -
Perf. and Reperf. 5113-5158,
5168-5175' and 5280-5350'
(565' 6-5/8" L 4408', inc 60' Perf.
(Behind 4-3/4")
C.P. 4344' - Reperf. 4348-4399')

Casing Record at End of Work:

13-3/8" C 757'
8-5/8" C 4005' O.K.
1572' 4-3/4" C 5376'
Perf. and Reperf. 5113-5158',
5168-5235' and 5280-5350'
(565' 6-5/8" L 4408', inc. 60'
Perf. (Behind 4-3/4")
C.P. 4344' - Reperf. 4348-4399')

1944	Depth	Effective Depth	Remarks
8-7	5379	Plug 5361	Moved in and rigged up to reperforate.
8-12	5379	C.O. 5360	Cleaned out sand from 5325 to 5360' with 2-7/8" bailer. Fluid level 3561'
8-14	5379		Perforated and reperforated 4-3/4" casing with 1/2" Lane-Wells gun holes as follows: 5350-5282' with 34 holes, 5235-5168' with 120 holes, and 5158-5113' with 21 holes.
8-22	5379	C.O. 5361	Checked top of oil at 3520'; top of water at 5325' and hole open to 5361'
8-25	5379		Ran rods and 2-1/2" plain and upset tubing to 5329' overall. Put well to pumping.

PRODUCTION DATA

Hours	Gross	Net	Gravity	Cut	Remarks	MAP	MAP BOOK	CARDS	BOND	FORMS
										114 121
8-27	24	1	1	26.2	4.4					
8-29	24	1	1	26.2	4.4					
8-31	0									
9-4	24	57	54	26.2	4.4					
9-9	8	12	10	26.2	16.0					
9-11	24	17	14	26.2	16.0					
9-13	24	15	9	26.2	20.0					
9-15	24	14	9	26.2	38.0					
9-17	24	14	9	26.2	38.0					

Changed pump

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-39835

Los Angeles 14. Calif. July 18, 19 44

Mr. W. S. Eggleston

Los Angeles 14. Calif.

121

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to plug & alter casing Well No. "Oil Operators" 4,
Section 13, T. 4 S., R. 13 W., S. E. B. & M., Long Beach Field, Los Angeles County,
dated July 15, 19 44, received July 17, 19 44, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.
Total depth 5379' - plug 5361'
13-3/8" cmtd. 757'
8-5/8" cmtd. 4005' O.K.
(565' 6-5/8" landed 4408', inc. 60' perf. C.P. 4344'. Perf. 4005-4028, 4070-4130' -
deepened through)
1572' 4-3/4" cmtd. 5376' - perf. and re-perf. 5113-5158', 5168-5175', 5280-5350'
2.

July, 1944 produced	87	26.2	40.0 - 29 days.
(Date)	(Net Oil)	(Gravity)	(Cut)"

PROPOSAL:

"The proposed work is as follows:

1. Add perforations 5175-5235' and re-perforate present perforations.
2. If wet or no fluid, plug to 5090' and test by Division of Oil and Gas.
3. Perforate 4850-4920' and test. If unsuccessful, test higher.
4. If any test is unsuccessful, plug to 20' above perforations and test by Division of Oil and Gas."

DECISION:

THE PROPOSAL IS APPROVED.

ERMA:OH

cc- P. A. W.
H. E. Winter
Long Beach

W/S

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Musser Deputy
ERMA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JUL 17 1944
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs Calif. July 15 19 44

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling,~~ plugging or altering casing at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.

Total depth 5379' - plug 5361'

13-3/8" cmtd. 757'

8-5/8" cmtd. 4005' O.K.

(565' 6-5/8" landed 4408', inc. 60' perf. G.P. 4344'. Perf. 4005-4028, 4070-4130' - deepened through)

1572' 4-3/4" cmtd. 5376' - perf. and re-perf. 5113-5158', 5168-5175', 5280-5350'

July, 1944
2. ~~Discovered~~ Produced 87 26.2 40.0 - 29 days.
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Add perforations 5175-5235' and re-perforate present perforations.
2. If wet or no fluid, plug to 5090' and test by Division of Oil and Gas.
3. Perforate 4850-4920' and test. If unsuccessful, test higher.
4. If any test is unsuccessful, plug to 20' above perforations and test by Division of Oil and Gas.

plug & alter casing

MAP MAP BOOK CLOSURE BOND FORMS
Blanket Bond
99071

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By Henry E. Winter
Division Engineer.

cc: P.A.W.

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

DIVISION OF OIL & GAS
RECEIVED
JUL 22 1941
LOS ANGELES, CALIFORNIA

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators No. 4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated 3-21-38

_____, was filed. FORWARDED
SIGNED *Henry E. Winter*
Date July 18, 1941 Title DIVISION ENGINEER
(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

CASING RECORD AT START OF WORK

13-3/8" C. 757'
8-5/8" C. 4005', O.K.
565' 6-5/8" L. 4408', inc. 60' perf.
CP. 4344'
Reperf: 4348-4399', Perf: 4005-4028',
4070-4130'.

CASING RECORD AT END OF WORK

13-3/8" C. 757'
8-5/8" C. 4005', O.K.
1572' 4-3/4" C. 5376'
Perf. and Reparf: 5113-58'; 5168-75';
5280-5350'
(565' 6-5/8" L. 4408', inc. 60' perf. behind
4-3/4" CP 4344', Reparf: 4348-4399'; Perf:
4005-4028'; 4070-4130').

1941	Depth	Eff. Depth	Remarks
3-19	4408	Plg. 4305	Pulled rods and tubing.
3-21	4407		Drilled out cement plug.
3-22	4408		Drilled out lead seal and bottom of liner.
3-23	4500		Drilled with 5-5/8" bits.
3-24	4555		Cored with 5-5/8" wire line core barrel.
3-28	5112		Drilled with 5-5/8" bits.
4-2	5379		Cored with 5-5/8" core barrel. Ran Schlumberger electric log and inclinometer from 4408' to 5375'. Co-ordinates at 5370', 155'S, 195'E.
4-9	5379		Under-reamed with Grant hydraulic under-reamer from 4112' to 5377'.
4-10	5379		Ran in 1572' 4-3/4" 16#, Grade "C" seamless second-hand liner, including 8-5/8" x 4-3/4" Burns liner hanger and adapter. Landed at 5376' with Baker float shoe on bottom and Baker float collar at 5361'. Cemented with 200 sacks by displacement method.
4-11	5379		Found top of cement at 3680' and drilled out to 3804' with 7-5/8" bit.

5376
15/12/41
3/8

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach

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Henry E Winter

Date July 18, 1941

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Date

1941

Date	Depth	Eff. Depth	Remarks
4-13	5379	Plg. 5361	Drilled out cement with 3-7/8" bit and 4-3/4" casing scraper from 3804' to 3814' and from 5305' to 5361'.
4-14	5379		Bailed mud with 6-5/8" bailer to 3093' and checked bottom with bailer. After 8 hours no rise in fluid as witnessed by Corwin of Division of Oil & Gas, and casing splice approved.
4-15	"		Perforated 4-3/4" casing with Lane-Wells gun, shooting .45 caliber bullets from 5113-5137' with 48 holes. 5280-5322' with 85 holes.
4-16	"		Landed 2 1/2 upset tubing at 5167'.
4-18	"		Swabbed fluid, ran in pump and rods, installed pumping unit, and put on production.

PRODUCTION DATA

	Bbls. Gross	Bbls. Net	A.P.I. Gravity	Cut	Hours Produced
4-18	72	54	-	24.7	19
4-19	36	34	23.2	6.1	24
4-20	38	36	23.2	6.4	24
4-21	39	37	23.2	6.4	24
4-22	36	34	23.2	6.4	24
4-23	31	29	23.2	6.4	18
4-24	33	31	23.2	6.0	24
4-25	31	29	23.2	6.0	24
4-26	32	30	23.2	6.0	24
4-27	32	30	23.2	6.0	24
4-28	32	30	23.2	6.0	24
4-29	20	19	23.2	6.0	10

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

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Date

<u>1941</u>	<u>Depth</u>	<u>Eff. Depth</u>	<u>Remarks</u>			
4-29	5379	Plg. 5361	Pulled rods and tubing.			
5-1	"		Bailed and swabbed perforations.			
5-2	"		Reperforated 4-3/4" liner with Lane-Wells gun, shooting .45 caliber bullets from 5114' to 5140', with 26 holes. 5280' to 5325', with 45 holes. Ran 2 1/2" tubing to 5290'. Ran in pump and rods. Connected pumping unit. Put on production.			
	<u>Bbls. Gross</u>	<u>Bbls. Net</u>	<u>A.P.I. Gravity</u>	<u>Cut</u>	<u>Hours Produced</u>	
5-2	37	18	23.2	50.0	4	
5-3	71	69	23.2	2.4	24	
5-4	34	33	23.2	2.5	24	
5-5	23	22	23.2	2.5	24	
5-6	27	26	23.2	2.5	18	
5-7	31	30	23.2	2.5	24	
5-8	6	6	23.2	2.5	4	
5-9	37	36	23.2	2.5	12	(Run pressure bomb)
5-10	29	28	23.2	2.5	24	
5-11	29	28	23.2	2.5	24	
5-12	30	29	23.2	2.5	24	
5-13	40	39	23.2	2.5	17	(Pull pressure bomb)
5-14	26	25	23.2	2.5	24	
5-15	29	28	23.2	2.5	24	
5-18	28	27	23.2	2.5	24	
5-20	20	20	23.2	2.5	24	
5-22	28	27	23.2	2.5	24	
5-24	26	25	23.2	2.5	24	
5-26	41	40	23.2	2.5	18	
5-28	27	26	23.2	2.5	24	
5-30	25	24	23.2	2.5	24	
6-2	3	3	23.2	2.5	3	

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

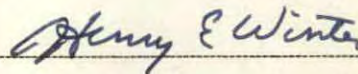
DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

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SIGNED


Date July 18, 1941Title DIVISION ENGINEER

(President, Secretary or Agent)

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Date

1941 Depth Eff. Depth Remarks

6-2 5379 Plg. 5361 Pulled rods and tubing.

6-4 " Ran Lane-Wells gun perforator, shooting .45 caliber bullets. Reperforated: 5113-5140', 28 holes; Perforated: 5140-5148', 38 holes; Perforated: 5168-5175', 15 holes; Reperforated: 5280-5325', 46 holes; Perforated: 5325-5350', 50 holes. Fluid level at 1830' by bailer after perforating.

6-5 " Ran 2 1/2" tubing to 5100'.

6-6 " Swabbing through tubing. Well flows by heads part time.

PRODUCTION DATA

	Bbls. Gross	Bbls. Net	A.P.I. Gravity	Cut	Hours Produced	
6-7	52 99	51 97	23.2 26.0	2.4 2.4	19 17	(Flowing and swabbing) (Ran in rods and put on pump)
6-8	103	101	26.0	2.4	24	
6-9	60	59	21.5	2.4	24	
6-10	49	48	26.0	2.4	24	
6-11	47	46	26.0	2.4	24	
6-12	45	44	26.4	1.8	19	
6-13	60	59	26.4	1.8	24	
6-14	59	58	26.4	1.8	24	
6-15	58	57	26.4	1.8	24	
6-18	54	53	26.4	1.8	24	
6-21	54	53	26.4	1.8	24	
6-24	7	7	26.4	1.8	3	(Pull rods)

6-27 Perforations washed with Yowell Type "3" washer.

6-28 Ran 2 1/2" upset tubing to 5384', ran in rods and pump, and put on production.

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
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Henry E Winter

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Date
1941

Depth Eff. Depth Remarks

5379 Plg. 5361

PRODUCTION DATA

	<u>Bbls. Gross</u>	<u>Bbls. Net</u>	<u>A.P.I. Gravity</u>	<u>Cut</u>	<u>Hours Pumped</u>
6-28	96	65	26.4	32.0	10
6-29	72	57	26.4	20.3	24
6-30	0	0	-	-	0 (Pump sanded)
7-1					(Pulled rods & tubing)
7-2	110	95	26.4	14.0	13 (Ran tubing, rods & pump)
7-3	81	62	26.4	14.0	
7-4	53	47	26.4	10.5	
7-5	54	51	26.4	5.9	
7-6	54	51	26.4	5.4	
7-7	52	49	26.4	5.4	
7-10	50	48	26.4	3.8	
7-11	49	48	26.4	3.0	24
7-12	30	29	26.4	3.3	19 (Sanded)
7-13					(Pulled rods & tubing)
7-14	85	81	26.4	4.8	24 (and re-ran)
7-15	64	61	26.4	4.8	24
7-16	54	52	26.4	4.2	24
7-17	52	50	26.4	3.0	24
7-18					

MEASUREMENT DATUM

All measurements from top of rotary table which is 18" above top of derrick floor, or 31" above top of cement foundation piers.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JUL 22 1941
LOS ANGELES, CALIFORNIA

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach
Well No. Oil Operators No. 4 Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

Henry E. Winter

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4408	4545	137	Drilled		Sand and shale.
4545	4555	10	Cored		Sand. (See Core Record)
4555	5112	557	Drilled		Sand and shale.
5112	5379	267	Cored		Sand and shale. (See Core Record)
		<u>TOTAL DEPTH - 5379'</u>			

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

DIVISION OF OIL & GAS
RECEIVED

JUL 22 1941

LOS ANGELES, CALIFORNIA

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

No. 4

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-23-41		5-5/8" Barrett Robishaw	4500	4510	0.8	0.4	0.4			Mixed burnt shale and oil sand.		
3-23-41		"	4510	4520	2.6	0.1	0.5			Hard fine to medium oil sand. Carbon particles. Good odor and fair cut. Hard burnt shale Mixed mud and fine oil sand. Slight odor and fair amber cut.		
3-23-41		"	4520	4530	1.3		0.9			Hard sandstone shell (probably at 4527' by driller) Loose mixed oil sand and mud. Fair odor and cut.		
3-23-41		"	4530	4535	0.7		0.7			Pieces of hard calcareous fine to medium grayish brown oil sand (carbonaceous). Fair odor and light amber cut. One piece has irregular vertical shale sand contact (possibly fault gouge).		
3-23-41		"	4535	4545	2.0		0.5			Hard slightly calcareous grayish brown oil sand. Fair odor and light cut.		
						1.5				1/2" pieces of firm fine to medium oil sand. Fair odor and amber cut. Oil sand has few grayish spots.		
3-24-41		"	4545	4555	0.6		0.3			Pieces of hard calcareous grayish brown oil sand. One piece has small shale streak at approximately 75°. Possibly fault gouge. Fair odor and light cut. Soft fine brown oil sand. (Mud striations). Good odor and light amber ether cut.		
						0.3						
						0.6						
3-24-41		"	4555	4565	2.6	1.0				Pieces of hard brown shale. One apparent dip of 20°. Mixed shale and oil sand and mud. (free oil) Hard brown shale.		
						0.7	0.7					
						0.2						
						1.9	0.7					

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

No. 4

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-24-41		5-5/8" Barrett Robishaw	4565	4575	1.8	0.1	0.7			Hard brown shale Fine mushy brown oil sand. Good odor and amber cut. Pieces of hard brown shale, badly broken by coring. Coring became hard at 4572'. DRILLED INTERVAL		
						1.0						
						1.1	0.7					
3-28-41		"	4575	5112						Hard calcareous shale		
		"	5112	5117	0.3	0.3						
3-28-41		"	5117	5122	2.9	0.6				Hard brown shale. Very poor possible dip of 45°. Fine brown oil sand, fair odor, good greenish cut. Firm brown shale.		
							2.0					
						0.3						
						0.9	2.0					
3-28-41		"	5122	5132	3.7	0.4				Sandy brown shale. Soft mushy fine to medium brown oil sand; fair odor, greenish amber cut. Mushiness could be from rain. Sandy brown shale Chunks of oily brown shale.		
							2.5					
						0.3						
						0.5						
						1.2	2.5					
3-28-41		"	5132	5142	0					NO RECOVERY		
3-28-41		"	5142	5147	4.5	0.4				Hard slightly calcareous brownish-black shale. Hard to firm, fine to medium, brown oil sand. Fair odor, good amber cut. Trade free oil on core.		
							4.1					
						0.4	4.1					
3-28-41		"	5147	5155	2.6	0.1			X	Sandy brown shale (Shell by driller at 5148'). Fine light brown oil sand, fair odor, dark greenish amber cut. Firm brownish-black shale, possible suggestion of 40° dip (?).		
							1.1					
						1.4						
						1.5	1.1					
3-28-41		"	5155	5156	0.0					No recovery.		
3-29-41		"	5156	5166	0.7	0.3				Chunks brown shale scattered through 6' of mud. Sandy brown shale.		
						0.4						
3-29-41		"	5166	5171	0.5	0.5	X			Chunks sandy brown shale with 2 seams fine brown oil sand. Greenish amber cut, free oil in fractures.		

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL

LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-29-41		5-5/8" Barrett-Robishaw	5171	5175	1.0	1.0				Hard brown shale.		
3-29-41		"	5175	5185	2.6		1.0			Medium to slightly coarse with pebbles, firm, light brown oil sand, good greenish-amber cut. Hard brownish-black sandy shale. Medium hard brown sandy shale. Soft, fine, light brown oil sand. Good odor, good greenish cut. Medium hard brownish-black shale. Suggestion of 45° dip. Possible fracture at 60°. Firm brown sandy shale. Soft fine light brown oil sand. Good odor.		
						0.8						
						0.1						
							0.2					
						0.1						
						0.2						
							0.2					
						1.2	1.4					
3-29-41		"	5185	5192	4.4		0.6			Fine to medium, firm to soft, light brown oil sand; fair odor.		
							0.6			Fine, firm, light brown oil sand. Dark amber cut. (Looks residual).		
							1.7			Fine to medium with few pebbles, firm to soft, light brown oil sand, fair odor, light greenish amber ether cut.		
							0.7		0.1	Hard gray sandstone shell. Fine to medium with few pebbles, firm to soft, light brown oil sand, fair odor, light greenish-amber cut.		
									0.7	Hard gray sandstone shell.		
							3.6		0.8			
3-29-41		"	5192	5199	2.8		2.8			Firm, fine to medium, light brown oil sand, poor odor, dark greenish-amber cut.		
3-29-41		"	5199	5205	0.3		0.3	X		Firm, fine, light brown oil sand with streaks gray sand. Poor odor, dark amber cut. (Looks residual).		
3-29-41		"	5205	5211	6.0		3.0			Soft to firm, fine, light brown oil sand, poor odor, dark greenish cut. Firm, biscuity, fine light brown oil sand, fair odor, dark cut.		
							3.0					
							6.0					

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

36

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

No. 4

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-29-41		5-5/8" 5211 Barrett-Robishaw	5217	5217	4.5	0.3		0.2		Firm to soft, fine to medium-fine gray sand. No odor. Hard black shale with possible fractures at 45° and 60°. Firm, fine, light brown oil sand with gray cast. No odor. Firm, fine to medium, light brown oil sand with fair odor. Good greenish-amber cut.		
						1.4						
						2.6						
						0.3	4.0	0.2				
3-29-41		"	5217	5223	1.0	1.0	X			Soft to firm, fine to medium-coarse with pebbles, brown oil sand with small streaks gray sand.		
3-29-41		"	5223	5229	2.1	2.0				Firm, fine to medium, brown oil sand with grayish cast. Dark cut. Hard brownish-black shale.		
						0.1						
3-30-41		"	5229	5235	1.0	1.0				Firm to soft, fine to medium fine, brown oil sand with grayish cast. Medium amber cut. Free oil on core and in breaks.		
3-30-41		"	5235	5241	5.0	2.3				Firm to soft, fine to medium-fine, brown oil sand with dark ether cut. Fair odor. Free oil on core and in breaks. Hard brownish-black slightly sandy shale. Firm, fine to medium brown oil sand with free oil on core. Hard brownish-black shale. Soft, mushy, fine, light brown oil sand. Hard brownish black shale. Soft fine light brown oil sand. Hard, burnt, black shale.		
						0.1						
						0.4						
						0.6						
						0.6						
						0.2						
						0.4						
						0.4						
						1.3	3.7					
3-30-41		"	5241	5245	2.0	0.4		X		Firm gray sandy shale with narrow seams gray sand at 40°. Hard brownish-black shale with fracture at 45°. Mud with hunks dark brown shale. Hard dark brown burnt shale.		
						0.4						
						0.9						
						0.3						
						2.0						
3-30-41		"	5245	5246	0.9	0.9				Hard dark brownish-black shale.		

Henry E Winter

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UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

708A 2-41 10M
PRINTED IN U.S.A.

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL
LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-30-41		5-5/8" Barrett-Robishaw	5246	5251	1.0	1.0				Hard brownish-black shale with small hunks and pieces of undergauge core.		
3-30-41		"	5251	5253	0.9	0.9		X		Firm brownish-black shale with a narrow seam of fine gray sand.		
3-30-41		"	5253	5259	4.0	1.5				Mud with hunks fairly soft brownish-black shale.		
						2.5				Hard, well-cut, dark brownish-black shale.		
3-30-41		"	5259	5264	5.0	5.0				Hard well-cut dark brownish-black shale. Shows no bedding but gives consistent fracture at 45° when broken.		
3-30-41		"	5264	5270	3.0	3.0				Mud interspersed with soft pieces dark brownish-black shale. Slightly sandy in spots.		
3-31-41		"	5270	5276	0.0					No recovery.		
3-31-41		"	5276	5280	0.0					No recovery.		
3-31-41		"	5280	5281	0.0					No recovery.		

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

38

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL
LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
3-31-41		5-5/8" Barrett-Robishaw	5281	5282	0.0					No recovery.		
3-31-41		5-5/8" Gauthey	5282	5295	12.2	2.8				Hard brownish-black shale with slickensides on 23° fractures. Apparent bedding approximately 45°. Soft to firm, fine light brown oil sand streaked with drilling mud. Good amber cut. Soft to firm brown sandy shale. Firm, fine, argillaceous light brown oil sand; good odor, dark greenish-amber cut. Occasional fine striations of sandy shale with bedding dip of approximately 35°. (At 5287', a streak of 0.05' firm gray sand and black shale. Sand had light amber cut and strong gassy odor). Hard brown shale, slightly sandy. Firm, fine light brown oil sand. Good odor. Hard brownish-black shale. Sand shale contact at approximately 35°. Firm, fine light brown oil sand. Dark greenish amber cut. Good odor. Hard brownish-black shale.		
						0.2						
						0.5	6.5	X				
						0.3	0.3					
						0.3						
						0.2						
						1.1						
						5.0	7.2					
4-1-41		"	5295	5310	1.1	(6.0)			X	(Drilling mud with fragments hard brown black shale scattered through it. One fragment gray sandstone shell recovered). Soft muddy dark brown shale. Firm sandy shale with inter-bedded lenses of gray sand. May be burnt.		
						0.7						
						0.4		X				
						1.1						
4-1-41		"	5310	5325	1.2	0.1				Hard brownish-black shale, broken up by coring. Firm, fine to medium-fine light brown oil sand. Good greenish-amber ether cut, fair odor. Soft to firm, muddy, black shale. Soft, mushy, fine to medium light brown oil sand. Firm, fine to medium-fine light brown oil sand. Hard gray sandstone shell. Soft, medium light brownish-gray sand with mud striations.		
						0.1						
						0.1	0.3					
						0.1						
						0.3		X	0.2			
						0.2	0.8		0.2			

Henry E Winter

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UNION OIL COMPANY OF CALIFORNIA
CORE RECORD

708A 2-41 10M
PRINTED IN U.S.A.

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 4 WELL LOCATION ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
4-1-41		5-5/8" Gauthey	5325	5340	0.0					No recovery		
4-1-41		"	5340	5346	5.7		1.3			Firm, fine to medium-fine, with pebbles, light brown oil sand. Fair odor, good greenish-amber cut.		
							0.5			Firm, fine to medium-fine, brown oil sand. Good odor, good greenish-amber cut.		
							1.2			Firm, fine to medium with pebbles, light brown oil sand. Fair odor, good greenish-amber cut.		
							1.4			Firm, fine to medium-fine with few pebbles, light brown oil sand. Good greenish-amber cut. Fracture at 5344" showed slickensides at 12° dip.		
							1.1			Firm, fine to medium, slightly coarse with many pebbles, light brown oil sand.		
							0.2			Firm, fine to medium, brown oil sand. Good odor, dark greenish-amber cut.		
							5.7					
4-2-41		5-5/8" Hughes	5346	5364	2.6	(5)		X		Rotary mud with a few streaks soft black shale and gray sand.		
							0.5			Firm, medium-fine, light brown oil sand. Good odor, good greenish-amber ether cut.		
							0.3			Soft, fine to medium, brown oil sand.		
									1.8	Hard gray sandstone shell.		
4-2-41		"	5364	5379	1.5		1.5			Soft-firm, fine-medium brown oil sand. (Grayish cast). Fair, but burnt odor, dark greenish cut. Whole core slightly burnt.		

Henry E. Winter

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No. 8399

DIVISION OF OIL AND GAS

LOS ANGELES

Calif. 4/22 19 41

Union Oil Co of Calif
Name of Operator

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 43

R. 13 N. Long Sch B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work

See log - Oil Operators 4 4/2/41

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By

E. H. Huggins Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-39382

Los Angeles, Calif. April 25, 1941.

Mr. W. S. Eggleston,
Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T. 4S., R. 13W. S. B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by

Chas. Corwin, Inspector

, representative of the supervisor,

on April 14, 1941. There was also present E. G. Trostel, Engineer,

W. A. Meginnis, Driller.

Casing Record 13-3/8" cem. 757', 8-5/8" cem. 4005'	Junk None
W. S. O.; 6-5/8" liner ld. 3843'-4408', c. p. 4344',	
perf. 4408'-4348', 4130'-4070' and 4028'-4005'; 4-3/4"	
liner cem. 3804'-5376'. T. D. 5379', plugged with cement	
5376'-5361'.	

The operations were performed for the purpose of demonstrating that no fluid has access to the well between the 4-3/4" and 8-5/8" casings,

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 5:00 P. M. AND MR. TROSTEL REPORTED THE FOLLOWING:

1. The hole was cleaned out to 4408'.
2. A 6-5/8" rotary hole was drilled from 4408' to 5379'.
3. Mud fluid was circulated 3-1/2 hr. before cementing the casing.
4. Electrical core readings showed the top of the Brown Zone 4630'.
5. On April 10, 1941, 1572' of 4-3/4" - 16 lb. casing was cemented at 5376' with 200 sacks of Colton cement.
6. Cement was drilled out of the 8-5/8" casing from 3680' to 3804' and out of the 4-3/4" casing from 3804' to 5361', equivalent to 35 and 118 sacks, respectively. = 153 5/8 sacks. 2 1/2 sacks used.
7. On April 14, 1941, at 9:00 a. m. the fluid in the hole was bailed to 3039'.

THE INSPECTOR NOTED THE FOLLOWING:

1. No fluid entered the well while standing 8 hr. for test.
2. The hole was open below 3915'.

The test was completed at 5:50 p. m.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT fluid does not have access to the well between the 4-3/4" and 8-5/8" casings.

cc- H. E. Winter
Long Beach
CC:G

R. D. BUSH

State Oil and Gas Supervisor

By *E. J. McGuire* Deputy

STATE OF CALIFORNIA -
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-35934

Los Angeles, Calif. January 13, 1941.

Mr. W. S. Eggleston,
Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

"OIL OPERATORS"

Your proposal to deepen Well No. 4

Section 13, T4 S., R13 W., S.B. B. & M., Long Beach Field, Los Angeles County,

dated Jan. 9, 1941, received Jan. 10, 1941, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice:

THE NOTICE STATES:

"The present condition of the well is as follows:

Total depth 4408' - Plug 4305'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408', inc. 60' perf. C.P. 4344'

Reperf. 4348-4399' and perf. 4005-4028 and 4070-4130'

It is proposed to deepen the well as a lease offset to Hilldon F.C. #4.

Last production - 1472 oil, 19,124 water - 31 days."

PROPOSAL:

"The proposed work is as follows:

1. Clean out to 4408' and deepen to approximately 5400'.

2. Cement 4-3/4" blank liner on bottom and gun perforate the top of the "S" zone and the top of the "T" Zone for production.

3. Test on production."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Any hole to be sidetracked in any oil zone shall be filled with cement, if possible.
3. This division shall be notified to examine cores and/or electrical log before running the 4-3/4" casing.
4. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
 - (a) A test after drilling out the cement to within 50' of the cementing point to demonstrate that no fluid has access to the well between the 4-3/4" and 6-5/8" casings.
 - (b) A production test within 10 days after the well has been placed on production.

cc- H. E. Winter
Long Beach
WJC:OH

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. H. H. H.

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JAN 10 1941
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs Cal. January 9 19 41

Mr. E. HUGUENIN,

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

DEAR SIR:

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of deepening, ~~redrilling, plugging or altering casing of~~ well No. Oil Operators 4
(Cross out unnecessary words)

13, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Long Beach Oil Field, Los Angeles County.

The present condition of the well is as follows:

Total depth 4408' - Plug 4305'

13-3/8" C 757'

8-5/8" C 4005' O.K.

565' 6-5/8" L 4408', inc. 60' perf. C.P. 4344'

Reperf. 4348-4399' and perf. 4005-4028 and 4070-4130'

It is proposed to deepen the well as a lease offset to Hilldon F.C. #4.
Last production - 1472 oil, 19,124 water - 31 days

The proposed work is as follows:

1. Clean out to 4408' and deepen to approximately 5400'.
2. Cement 4-3/4" blank liner on bottom and gun perforate the top of the "S" Zone and the top of the "T" Zone for production.
3. Test on production.

deepen

Respectfully yours

DATE	BY	FOR	TO	BY	TO
				✓	✓

UNION OIL COMPANY OF CALIFORNIA

Name of Company or Operator

By

Henry E. Winter
Division Engineer.

ADDRESS NOTICE TO DEPUTY STATE OIL AND GAS SUPERVISOR IN CHARGE OF DISTRICT WHERE WELL IS LOCATED

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #4, Sec. 13, T. 4-3, R. 13-W, 3B B. & M.In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated March 21, 1938, was filed.

SIGNED

*Henry E Winter*Date April 4, 1938Title District Engineer

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

CASING RECORD AT START OF WORK:

Depth - 4408'
13-3/8" C 757'
8-5/8" C 4005' OK
565' 6-5/8" L 4408', inc. 60' perf.
C. P. 4344'. Reperf. 4399-4348

FOOTAGE	
112	121

CASING RECORD AT END OF WORK:

Depth - 4408, Plugged to 4305'
13-3/8" C 757'
8-5/8" C 4005'
565' 6-5/8" L 4408', inc. 60' perf.
C. P. 4344'. Reperf. 4399-4348'
Perf. 4130-4070 & 4028-4005

Eff.

1938	Depth	Depth	Remarks
3-17	4408		Took out pumping unit and pulled rods and tubing.
3-19	4408		Cleaned out liner to 4397'. Dumped 24 sacks of Victor construction cement in stages from 4397'.
3-20	4408 Plug 4305		Located top of cement plug at 4305'. Perforated 6-5/8" casing from 4130 to 4070 with 83 holes and 4028 to 4005 with 36 holes, using Lane-Wells 5-3/4" 12 shot gun with .45 caliber shells.
3-21	4408	" 4305	Landed 3" upset tubing at 3979.27'. Put well on pump at 1:00 PM 3-21-38. 180 gross, 127 net, 21.7 grav., 29.4% cut - P 11 hrs.
3-22		452 "	360 " 22.1 20.4 P 24 "
3-23		523	506 22.1 3.2 P 24 "
3-24		545	534 23.6 2.0 P 24 "
3-25		563	556 23.6 1.2 P 24 "
3-26		531	525 23.6 1.1 P 24 "
3-27		506	499 23.6 1.4 P 24 "
3-28		493	488 23.6 1.1 P 24 "
3-29		477	472 23.6 1.0 P 24 "
3-30		465	459 23.6 1.2 P 24 "
3-31		449	445 23.6 1.0 P 24 "

SUBMIT LOG IN DUPLICATE

FILL TH INK IN WITH TYPEWRITER. WRITE ON ONE SIDE OF PAI ILY

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 24 1938
LOS ANGELES, CALIFORNIA

Sun Oil Co LOG OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach
Well No. Oil Operators #4 NWLBU #8-4 Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Location 348' S.W. 1/4 along the prolongation of the center line of San Antonio Drive from its intersection with the center line of Riverside Drive, thence N.W. 1/4 at right angles 853'. Elevation 53.88

In compliance with the provisions of Chapter 718, Statutes of 1915, as amended, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 3-21-38 Signed Henry E. Winters

(Engineer or Geologist) _____ Title DISTRICT ENGINEER
(Superintendent) _____ (President, Secretary or Agent) _____

Commenced drilling January 1, 1938 Completed drilling _____ Drilling tools Cable Rotary

Total depth 4408 Plugged depth _____ GEOLOGICAL MARKERS DEPTH

Junk Wilber Shale 3586-3653

Alamitos Shale 3784-3842

H 3971

I 4005

Commenced producing 2-28-38 (date) Flowing/gas lift/pumping K 4306

(cross out unnecessary words) 4348

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production <u>30</u>	<u>21.2</u>	<u>7.8</u>			
Production after <u>16</u> days	<u>21.7</u>	<u>16.5</u>			

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Casing landed in	Number of Sacks of Cement	Depth of Cementing if through perforations
<u>13-3/8</u>	<u>757</u>	<u>Surface</u>	<u>45.97#</u>	<u>New</u>	<u>Seamless</u>	<u>Slip-joint</u>	<u>17"</u>	<u>350</u>	
<u>8-5/8</u>	<u>4005</u>	<u>"</u>	<u>32# & 36#</u>	<u>New & Used</u>	<u>"</u>	<u>C</u>	<u>12 1/2"</u>	<u>400</u>	
<u>6-5/8</u>	<u>4408</u>	<u>3843</u>	<u>26#</u>	<u>New</u>	<u>"</u>	<u>C</u>	<u>7-5/8 U.R. 8 1/2"</u>	<u>125</u>	<u>4344</u>

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
<u>6-5/8</u>	<u>4348</u> ft.	<u>4408</u> ft.	<u>120 mesh</u>	<u>16</u>	<u>6</u>	<u>Kobe</u>
	ft.	ft.	<u>Reperf. 4348-4399 - 60</u>			<u>holes L. & W. gun</u>
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths Schlumberger from 757 to 4408 (Attach Copy of Log)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 24 1938
1480 100125 CALIFORNIA

LOG OF OIL OR GAS WELL—CONTINUED

FIELD Union Oil Company of California COMPANY Long Beach
Sec. 13, T. 4-S, R. 13-W, S.B. B. & M. Well No. Oil Operators #4

FORMATIONS PENETRATED BY WELL

Henry E. Winters

DEPTH TO		Thickness	Name of Formation
Top of Formation	Bottom of Formation		
0	170	170	Surface clay
170	364	194	Sand and gravel
364	388	24	Sand and clay
388	713	325	Hard sand
713	760	47	Shale
760	1577	817	Shale and streaks of sand
1577	1883	306	Hard sand
1883	2775	892	Shale and streaks of sand
2775	2863	88	Sand
2863	2990	127	Shale and streaks of sand
2990	3112	122	Sand and streaks of shale
3112	3114	2	Shell
3114	3193	79	Sand and streaks of shale
3193	3195	2	Shell
3195	3230	35	Shale and streaks of sand
3230	3231	1	Shell
3231	3371	140	Shale and streaks of sand
3371	3372	1	Shell
3372	3525	153	Shale and sand
3525	3530	5	Hard sand
3530	3560	30	Shale and sand
3560	3644	84	Sand and streaks of shale
3644	3730	86	Shale and streaks of sand
3730	3880	150	Hard sand
3880	3951	71	Shale and streaks of sand
3951	3953	2	Shell
3953	4015	62	Shale and streaks of sand (See Core Record)
4015	4408	393	Shale and sand (See Core Record)

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Union Oil Company of California FIELD Long BeachWell No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.Signed Herry E WinterDate 3-21-38 Title DISTRICT ENGINEER
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date
1938

CASING RECORD AT START OF WORK				
New Well	Section	Cards	134	121

CASING RECORD AT END OF WORK

13-3/8 C. 757
8-5/8 C. 4005 O.K.
565 - 6-5/8 L. 4408, incl. 60' perf. C.P. 4344
Reperf 4399 - 4348

Depth	Eff. Depth	Remarks
-------	------------	---------

1-1	50	Spudded in with 18-5/8" rotary bit and drilled to 50'. Cemented 18-5/8 conductor pipe at 50' with 46 sax Velo cement.
1-4	758	Drilled with 17" rotary bits to 758. Cemented new 13-3/8-45.97# National Seamless slip-joint casing at 757 with 350 sax Velo treated cement. Cementing operations witnessed and approved by Karmelich of D.O.G.
1-5	911	Found top of cement at 754. Cleaned out cement and plugs and drilled ahead with 12 1/2 bits.
1-22	4015	Drilled with 12 1/2 bits to 3955 and cored with 7-5/8 core barrels to 4015. Ran Schlumberger Survey.
1-23	4015	Reamed out core hole with 12 1/2 bit to 4005. Cemented 8-5/8 - 32# Grade C (1263 of 8-5/8 - 36# on bottom) 8 thread rounded seamless casing at 4005 with 400 sax cement (200 sax Victor Oil Well and 200 sax Victor Construction)
1-28	4070	Found top of cement at 3978. Drilled out cement and plugs to 4005 and cleaned out to 4010. Water Shut Off test on 8-5/8 casing at 4005 witnessed and approved by Corwin of D.O.G. Drilled with 7-5/8 bit to 4070.
2-3	4408	Cored with 7-5/8 core barrels to 4408. Ran Schlumberger Survey.
2-5	4408	Under-reamed hole to 8 1/2" from 4007 to 4408. Landed 565' of 6-5/8 - 26# Grade C casing at 4408 including 60' of (16-2-6) 120 mesh Kobe perforated on bottom. Cemented liner through ports of Baker Whirler basket at 4344 with 125 sax of Victor Oil Well cement.

4408
60
43444408
325
4343

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Union Oil Company of California FIELD Long Beach

Well No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.E. B. & M.

Signed Herry E Winter

Date 3-21-38 Title DISTRICT ENGINEER
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	Depth	Eff. Depth	Remarks
1938			
2-10	4408	4270	Found top of cement at 3676. Drilled out cement inside of 6-5/8 liner to 3932. Bailed fluid to 2535. Water Shut Off Test on 6-5/8 spliced liner, cemented thru perforations at 4344, witnessed and approved by Karmelich of D.O.G. No rise in 8 hours. Drilled out cement to 4270.
2-11	4408	4408	Drilled out cement to 4343 and cleaned out to bottom of liner, Landed 3" upset tubing at 4318 including 521' of Baash-Ross insert tubing on bottom.
2-17	"	"	Changed from mud to water and swabbed fluid to 3000'. Very little oil or gas. Pulled tubing. Alternated between running 6-5/8 swab past perforations as agitator, and bailing mud from bottom. Landed 3" upset tubing at 4324. Installed pumping unit and started well pumping at 7 P.M., 2-17-38.
2-18			43 gross 42 net 2.8% out P10 hrs.
2-19			15 14 21.2 grav. 1.4 P24
2-20			17 16 " 1.0 P24
2-21			3 2 " 1.1 P24
2-22			31 30 " 1.0 P24
2-23			28 27 " 1.0 P24
2-23			1 1 " 1.0 P3 hrs. Pulled P&T
2-28	4408	Open 4402	Cleaned out sand to 4402. Reperforated 6-5/8 liner from 4399 to 4348 with 60 holes, using Lane-Wells 5 1/2" - 12 shot gun with .45 caliber shells. Landed 3" upset tubing at 4323. Installed pumping unit and started well pumping at 10 P.M., 2-28-38)
3-1			128 gross 0 net 100.0% out P7 hrs.
3-2			33 30 21.2 grav. 7.8 P24
3-3			27 26 " 7.8 P24
3-4			25 24 21.2 2.6 P24
3-4			23 20 21.2 13.3 P24

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Union Oil Company of California FIELD Long BeachWell No. Oil Operators #4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.Signed Henry E WinterDate 3-21-38 Title DISTRICT ENGINEER

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1938Depth Eff. Depth Remarks

3-5	4408	Open	4402	21 gross	19 net	21.2 grav.	10.2% out	P24 hrs.
3-6				21	19	21.2	8.2	P24
3-7				19	16	21.2	15.3	P24
3-8				18	13	21.7	27.5	P24
3-9				18	13	21.7	35.6	P24
3-10				18	14	21.7	24.2	P24
3-11				18	14	21.7	24.2	P24
3-12				17	14	21.7	17.2	P24
3-13				17	14	21.7	17.8	P24
3-14				18	15	21.7	16.5	P24
3-15				17	14	21.7	18.4	P22 hrs. Eng.
3-16				17	14	21.7	18.4	P24
3-17				7	6	21.7	17.2	P10

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

FIELD

COMPANY

LEASE

105 ACRES 4

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-21-38	1	7-5/8" Soil	3955	3970	7.3	1.8		2.5		Firm Soft Fine Gray Sand Hard Dark Brown Shale, sandy in parts Firm, very Fine Silty Gray Sand Firm Soft Fine to Medium Gray Sand Dip 23° Hard Dark Brown Shale Firm Soft Fine to Medium Gray Sand		
						0.1		1.4				
						1.9		5.4				
1-21-38	2	"	3970	3985	13.3	0.2		0.2		Firm Soft Fine Gray Sand Hard Dark Brown Shale. Dip 16° Firm Soft Fine Gray Sand		
						6.1	0.1	0.3		Hard Dark Brown Shale with partings of Fine Brown Oil Sand. Streak (0.1) of Fine Brown Oil Sand 1.8' from top. Shale sandy towards bottom Fractures of 48° and 24° Firm Soft Fine Brown Oil Sand. Good Odor		
						0.2				Hard Dark Brown Shale		
						0.6				Firm Soft Fine Brown Oil Sand		
						0.6				Hard Dark Brown Shale		
						0.9				Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.5				Hard Dark Brown Shale with inclusions of Fine Gray Sand		
						0.1	2.3			Firm Soft Fine Brown Oil Sand. Streak of Brown Shale (0.1) 1.2' from top. Good Odor and Dark Amber Cut		
						7.7	5.1	0.5				
1-22-38	3	"	3985	4000	10.3	1.1				Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.3				Hard Dark Brown Shale. Oil in Fracture joints		
						0.8				Firm Soft Medium Brown Oil Sand. Good Odor		
						0.6				Hard Dark Brown Shale with inclusions of Fine Gray Sand. Sandy in spots		
						6.0				Hard Dark Brown Shale, badly broken and mixed with mud		
						0.6				Firm Soft, very Fine Argillaceous Silty Oil Sand, slightly mixed with mud. Fair Odor and Amber Cut		
						0.9				Hard Dark Brown Shale with inclusions of Fine Gray Sand		
						7.8	2.5					

Henry E. Winter

ELEVATION

53.88

LOCATION

WELL

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OIL OPERATORS

COMPANY

UNION OIL

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CORE RECORD

UNION OIL COMPANY OF CALIFORNIA

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LEASE

105 ACRES 4 CALIFORNIA

LOCATION

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WELL ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-21-38	1	7-5/8" Soli	3935	3970	7.3	1.8		2.5		Firm Soft Fine Gray Sand Hard Dark Brown Shale, sandy in parts Firm, very Fine Silty Gray Sand Firm Soft Fine to Medium Gray Sand Dip 23° Hard Dark Brown Shale Firm Soft Fine to Medium Gray Sand		
						0.1		1.4				
						1.9		5.4				
1-21-38	2	"	3970	3985	13.3	0.2		0.2		Firm Soft Fine Gray Sand Hard Dark Brown Shale. Dip 16° Firm Soft Fine Gray Sand		
						6.1	0.1	0.3		Hard Dark Brown Shale with partings of Fine Brown Oil Sand. Streak (0.1) of Fine Brown Oil Sand 1.8' from top. Shale sandy towards bottom Fractures of 48° and 24° Firm Soft Fine Brown Oil Sand. Good Odor		
						0.2				Hard Dark Brown Shale		
						0.6	0.6			Firm Soft Fine Brown Oil Sand		
						0.6				Hard Dark Brown Shale		
						0.9	0.9			Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.5				Hard Dark Brown Shale with inclusions of Fine Gray Sand		
						0.1	2.3			Firm Soft Fine Brown Oil Sand. Streak of Brown Shale (0.1) 1.2' from top. Good Odor and Dark Amber Cut		
						7.7	5.1	0.5				
1-22-38	3	"	3985	4000	10.3	1.1				Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.3				Hard Dark Brown Shale. Oil in Fracture joints		
						0.8				Firm Soft Medium Brown Oil Sand. Good Odor		
						0.6				Hard Dark Brown Shale with inclusions of Fine Gray Sand. Sandy in spots		
						6.0				Hard Dark Brown Shale, badly broken and mixed with mud		
						0.6				Firm Soft, very Fine Argillaceous Silty Oil Sand, slightly mixed with mud. Fair Odor and Amber Cut		
						0.9				Hard Dark Brown Shale with inclusions of Fine Gray Sand		
						7.8	2.5					

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

FIELD

UNION OIL

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OIL OPERATORS

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WELL

LOCATION

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ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-22-38	4	7-5/8" Soil	4000	4015	10.2	5.3				Hard Dark Brown, slightly Silty Shale with inclusions of Fine Gray Sand		
						0.3				Firm Fine Silty Argillaceous Brown Oil Sand with thin Streaks and partings of Dark Brown Shale		
						1.2				Hard Dark Brown Silty Shale. Streak of Fine Brown Oil Sand 0.8' from top		
						2.0				Firm Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.1				Hard Dark Brown Shale		
						1.3				Firm Soft Fine Brown Oil Sand. Good		
						6.6	3.6			Odor and Dark Amber Cut		
			4015	4070						Drilled interval		
1-29-38	5	7-5/8" parrett-Robishaw	4070	4078	2.2	0.2				Hard Dark Brown Shale		
									0.6	Hard Shale Shell. Top 0.4 badly broken in coring		
						1.0				Hard Dark Brown Silty Shale with small inclusions of Fine Gray Sand		
						0.1				Hard Brown Shale		
						0.3				Fine Brown Oil Sand mixed with mud		
						1.3	0.3		0.6	and cavings		
1-29-38	6	"	4078	4083	0					No Recovery		
1-29-38	7	"	4083	4092	3.2		0.4			Firm Soft Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.1				Hard Dark Brown Shale		
							0.4			Firm Soft Fine Silty Argillaceous Brown Oil Sand with Streaks of Brown Shale		
						0.2				Hard Dark Brown Silty Shale		
							0.3			Firm Soft Fine Silty Argillaceous Brown Oil Sand with thin Streaks of Brown Shale		
						0.5				Hard Dark Brown Shale with thin Streaks of Fine Silty Grayish-Brown Sand		
						0.2				Hard Dark Brown Shale with Streaks of Fine Silty Brown Oil Sand		
							0.2			Firm Soft Fine Silty Argillaceous Brown Oil Sand		
						0.2				Hard Silty Brown Shale		
							0.4			Firm Soft Fine Silty Brown Oil Sand with partings of Brown Shale (Burnt in coring)		
						0.3				Hard Dark Brown Silty Shale		
						1.5	1.7					

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA

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ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-29-38	8	7-5/8" Barrett-Robishaw	4092	4100	1.5	0.2	0.8			Hard Dark Brown Shale Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut Firm Fine Silty Argillaceous Brown Oil Sand. Good Odor and Amber Cut. Parting 31°		
						0.2	1.3					
1-29-38	9	"	4100	4109	0.1	0.1				Hard Dark Brown Silty Shale		
1-29-38	10	7-5/8" Soil	4109	4124	14.2		2.0			Firm Soft Fine to Medium Brown Oil Sand. Good Odor and Dark Amber Cut Firm Soft coarse Pebbly Brown Oil Sand Firm Soft Medium to coarse Brown Oil Sand Firm Fine Silty Argillaceous Brown Oil Sand. Good Odor and Dark Amber Cut. Dip 18° Firm Soft Medium to coarse Brown Oil Sand Hard Dark Brown Shale Firm Fine Silty Argillaceous Brown Oil Sand - Dip 17° Firm Soft coarse Brown Oil Sand Firm Fine Silty Argillaceous Brown Oil Sand - Dip 17° Soft coarse Brown Oil Sand. Good Odor and Dark Amber Cut Firm Fine Silty Argillaceous Brown Oil Sand with streaks of Hard Brown Shale. Bottom 0.3 mixed with mud Hard, slightly Calcareous Shale Shell Firm Soft Fine Brown Oil Sand, grading to Medium at bottom. Good Odor and Dark Amber Cut Hard Dark Brown Shale Firm Soft Fine Silty Argillaceous Brown Oil Sand. Streak of Hard Brown Shale 0.3 from top		
						0.2						
						0.2						
						1.4						
						0.3						
						0.6						
						0.1	1.0					
										0.3		
							1.7					
						0.2						
							0.5					
						0.5	13.4		0.3			

Henry E. White

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

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ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	11	7-5/8" Soli	4124	4139	13.6		1.4			Firm Soft Medium Brown Oil Sand. Good Odor and Dark Amber Cut		
						1.2	0.3			Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand		
							2.2			Firm Soft Fine to Medium Brown Oil Sand. Good Odor		
						0.5				Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand in bottom 0.3		
							3.3			Soft Fine to Medium Brown Oil Sand		
						0.4				Hard Dark Brown Shale		
							0.2			Soft Fine Brown Oil Sand		
						2.1	0.3			Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand		
							0.7			Soft Fine Silty Argillaceous Brown Oil Sand, mixed with mud. Good Odor and Dark Amber Cut		
						0.9	0.1			Hard Dark Brown Shale with Streaks and partings of Fine Brown Oil Sand		
						5.1	8.5					
1-30-38	12	"	4139	4155	16.0		0.5			Firm Soft Fine Brown Oil Sand, mixed with mud		
							5.8			Firm Soft Fine to Medium Brown Oil Sand, mixed with mud		
						0.1	2.7			Firm Soft Fine Silty Argillaceous Brown Oil Sand - Streaks of Hard Brown Shale 0.2 and 0.5 from top		
							6.9			Firm Soft Fine to Medium Brown Oil Sand, badly mud washed and streaked with mud		
						0.1	15.9					
1-30-38	13	"	4155	4170	6.5		0.7			Soft Fine Brown Oil Sand, badly mixed with mud		
							5.8			Firm Soft Medium to coarse, slightly Pebbly, Brown Oil Sand. Fair Odor and Dark Amber Cut		
							6.5					

Henry E Winter

CORE RECORD

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UNION OIL

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LOCATION

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ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	14	7-5/8" Soli	4170	4185	11.9	0.2	0.2			Hard Dark Brown Silty Shale		
						0.2	0.1			Firm Soft Coarse Brown Oil Sand		
										Hard Dark Brown Silty Shale with streaks and partings of Fine Brown Oil Sand		
							2.1			Firm Soft Medium to coarse Brown Oil Sand		
						0.2				Hard Dark Brown Shale		
										Contact to Sand below approximately 20°		
							1.7			Firm Soft Medium to coarse Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.8				Hard Dark Brown Silty Shale with many thin streaks of Fine Brown Oil Sand - Contact to Sand above 24°		
							0.9			Firm Soft Fine Brown Oil Sand. Bottom 0.4 Hard and contains inclusions of Black Carbonaceous Material		
										Dip 13°-16°		
						0.4				Hard Dark Brown Silty Shale		
							1.6			Firm Fine, slightly Argillaceous Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.4				Hard Dark Brown Silty Shale		
							3.0			Firm Soft Fine Brown Oil Sand, grading to Medium in bottom 1.0'.		
						2.3	9.6			Good Odor		

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

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LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	15	7-5/8" Soil	4185	4300	14.4		2.1			Firm Soft Medium Brown Oil Sand. Good Odor and Dark Amber Cut		
						1.1				Hard Dark Brown Silty Shale with partings of Fine Brown Oil Sand Dip 22°. Fracture of 10°		
							0.3			0.8 Hard, slightly Calcareous Shale Shell, badly fractured 0.1' from top		
						0.2				Firm Soft Fine Silty Argillaceous Brown Oil Sand with Streaks of Brown Shale		
						1.4				Hard Dark Brown Silty Shale. Dip 22°		
						0.3	0.1			Firm Soft Fine Silty Argillaceous Brown Oil Sand. Thin streaks of Brown Shale		
						0.5	1.0			Hard Dark Brown Silty Shale with streaks of Fine Brown Oil Sand		
						0.3				Firm Fine Silty Argillaceous Brown Oil Sand with streaks of Dark Brown Shale		
						0.2				Hard Dark Brown Silty Shale. Dip 25°		
						0.2	1.7			Firm Soft Fine Silty Argillaceous Brown Oil Sand. Good Odor		
						0.5	0.1			Hard Dark Brown Silty Shale		
						0.2				Firm Soft Fine Silty Argillaceous Brown Oil Sand with streaks of Brown Shale. Good Odor and Dark Amber Cut		
						0.9				Hard Dark Brown Silty Shale with streaks of Fine Brown Oil Sand		
						0.4	0.2			Soft Fine Silty Argillaceous Brown Oil Sand		
						0.3				Hard Dark Brown Silty Shale		
						0.1	0.6			Firm Fine Brown Oil Sand with streaks of Brown Shale		
						5.0	8.6		0.8			

Henry E. Winter

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

FIELD

COMPANY

LEASE

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WELL

LOCATION

33.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-30-38	16	7-5/8" Soli	4200	4215	15.0		2.2			Firm Soft Medium to coarse Brown Oil Sand. Good Odor and Dark Amber Cut		
						0.3	0.5			Firm Fine Silty Argillaceous Brown Oil Sand with Streaks of Dark Brown Shale		
							2.3			Firm Soft Fine to Medium Brown Oil Sand. Good Odor - Dip 25°		
						0.2				Hard Dark Brown Silty Shale		
							0.4			Firm Soft Fine Silty Argillaceous Brown Oil Sand		
						0.7	0.2			Hard Dark Brown Silty Shale with streaks of Medium to coarse Brown Oil Sand. Fracture of 39° with Slickensides along dip		
						0.2	1.0			Firm Soft Fine Silty Argillaceous Brown Oil Sand with streaks of Dark Brown Shale		
						0.3				Hard Dark Brown Silty Shale		
							6.7			Fine to Medium Brown Oil Sand with streaks of Fine Silty Argillaceous Oil Sand. Good Odor and Dark Amber Cut		
						1.7	133					

Henry E. White

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

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WELL

LOCATION

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ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-31-38	17	7-5/8" Sol1	4215	4230	15.0	0.1	1.9			Firm Soft Fine Brown Oil Sand with streaks and inclusions of Fine Gray Sand. Streak of Brown Shale (0.1) 0.3 from bottom. Fair Odor and Amber Cut		
						0.5				Hard Dark Brown Silty Shale Contact to Sand above irregular and at angle of 45°		
						1.0				Apparent Dip of Shale -34° Hard Dark Brown Silty Shale, badly broken and mixed with mud		
						0.5				Firm Soft Fine Brown Oil Sand Fair Odor		
						0.6	0.2			Hard Dark Brown Silty Shale with streaks and partings of Fine Brown Oil Sand - Parting Planes 18°		
						0.2	0.7			Soft Fine Brown Oil Sand with streaks of Shale. Top mixed with mud		
						2.4	0.2			Hard Dark Brown Silty Shale with inclusions of Fine Gray Sand. Also streaks and partings of Fine Brown Oil Sand		
						2.5				Firm Soft Medium to coarse Brown Oil Sand. Fair Odor and Amber Cut. Sand looks poor		
						0.3				Hard Dark Brown Silty Shale. Fracture of 39° with Slickensides along Dip		
						0.3				Firm Soft Fine Brown Oil Sand		
						0.4				Hard Dark Brown crushed and Flaky Shale		
									1.0	Hard, slightly Calcareous Shale Shell		
						0.8				Hard Dark Brown Silty Shale		
								0.2		Soft Fine Gray Sand, mixed with mud		
						0.2				Hard Dark Brown Silty Shale		
								1.0		Soft Loose Fine Gray Sand. No Odor		
						6.5	6.3	1.2	1.0	and light Straw Cut		

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

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ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
1-31-38	18	7-5/8" Soli	4230	4245	12.6	0.4		0.8		Firm Soft Fine to Medium Gray Sand		
								1.2		Hard Dark Brown Silty Shale		
						0.5				Firm Soft Fine Dark Gray Sand		
										Hard Dark Brown Silty Shale with streaks of Fine Gray Sand in bottom		
								4.5		0.2 - Good Dip of 21°		
										Firm Soft Fine Gray Sand. Top 0.8		
										Fine Silty Dark Gray, slightly Argillaceous		
						1.5		0.2		Hard Dark Brown Silty Shale with streaks of Fine Gray Sand		
								2.5		Firm Soft Fine Gray Sand. Top 0.4		
										Fine Silty Dark Gray, slightly Argillaceous		
						0.7		0.3		Hard Dark Brown Silty Shale and Fine Silty, slightly Argillaceous		
										Dark Gray Sand. Shale and Sand badly broken and mixed with mud		
						3.1		9.5				
1-31-38	19	"	4245	4260	13.8			13.8		Firm Soft Massive Medium to coarse Gray Sand. Sand poorly sorted and slightly Pebbly in spots		
1-31-38	20	"	4260	4275	13.0			13.0		Firm to Firm Soft Massive Fine to coarse, poorly sorted Gray Sand - Pebbly in spots		
1-31-38	21	"	4275	4290	14.2			14.1	0.1	Firm Soft to Soft Massive Fine to coarse Gray Sand. Top 0.9 badly mixed with mud. Hard Calcareous Sandstone Shell 3.6 from top		
2-1-38	22	"	4290	4305	15.0			12.2		Firm Soft Massive Fine to coarse Gray Sand. Several fairly Hard, slightly Calcareous spots. Bottom 1.0 Fine and mixed with mud		
								1.9		Firm Soft Medium Gray Sand. Inclusion of Silty Brown Shale 0.8 from top		
						0.9				Hard Sandy Dark Brown Shale with inclusions of Gray Sand - Streaks of		
						0.9		14.1		Gray Sand 0.5 from top		
										Note--Bottom 2.8 of this Core was recovered in next Core bbl.		

Henry E. Winters

CORE RECORD

LONG BEACH

FIELD UNION OIL

COMPANY OIL OPERATORS

LEASE 4

WELL

LOCATION 53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
2-1-38	23	7-5/8" Soli	4305	4310	5.0	1.4 0.8 0.8 1.7 4.7		0.3		Firm Soft Coarse Gray Sand Hard Silty Dark Brown Shale Dips 17° and 22° Hard Broken Black Silty Shale Hard Black Shale Hard Silty Dark Brown Shale - Shale badly broken and Burnt in Coring		
2-1-38	24	"	4310	4319	2.4	2.4				Hard broken and fractured Black Shale, badly mixed with mud Inclusions of Fine Gray Sand in bottom 0.4		
2-1-38	25	"	4319	4329	10.0	9.0 1.0 10.0				Hard Broken and fractured, Dark Brown to Black Shale. Top 2.3 badly fractured with vertical fractures. Dip approximately 20° Hard Dark Brown to Black Silty Shale		
2-2-38	26	Barrett-Robishaw	4329	4337	6.8	5.8 0.9 0.1 5.9	0.9			Hard Dark Brown to Black Silty Shale, sandy towards bottom. Inclusions of Fine Brown Oil Sand in bottom 0.8 Dip 20° Soft Mushy Fine Brown Oil Sand. Good Odor and Dark Amber Cut Hard Dark Brown Silty Shale with inclusions of Fine Brown Oil Sand		
2-2-38	27	"	4337	4346	8.2	0.2 1.8 0.1 2.1 4.0 4.3	3.9			Hard Dark Brown Silty Shale Soft Mushy Fine Brown Oil Sand. Good Odor and Dark Amber Cut Hard Fractured Dark Brown Silty Shale Soft Mushy Fine Brown Oil Sand. Good Odor and Dark Amber Cut Hard Dark Brown Silty Shale. Nearly vertical fractures 2.5 from bottom Dip 22°		
2-2-38	28	"	4346	4355	7.7	0.8 1.4 5.7 0.6	7.1			Hard Black Shale. Dip 23°. Fracture of 15° at bottom Soft Mushy Fine Silty Argillaceous Brown Oil Sand, mixed with mud. Fair Odor and Amber Cut Soft Medium to coarse Brown Oil Sand. Fair Odor and Dark Amber Cut		
2-2-38	29	"	4355	4364	0					No Recovery		

Hervey E. Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

4

FIELD

COMPANY

LEASE

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
2-2-38	30	7-5/8" Barrett-Robishaw	4364	4373	4.3	0.2	0.2			Soft Medium to coarse Brown Oil Sand		
						0.2				Hard Fractured and crushed Black Shale		
							0.3			Soft Fine Silty Argillaceous Brown Oil Sand, mixed with mud		
						0.2				Hard Fractured Black Shale		
							0.3			Oil Sand as above		
						0.2				Firm, very Silty Brown Shale		
							0.6			Oil Sand as above. Fair Odor and Dark Amber Cut		
						0.4				Hard Fractured Silty Black Shale with streaks of Fine Brown Oil Sand. Fractures of 21° and 37°		
							0.3			Silty Oil Sand, as above		
						0.3	0.1			Hard Fractured Silty Black Shale with streaks of Fine Brown Oil Sand		
							0.5			Firm Soft Fine to Medium Brown Oil Sand. Fair Odor and Amber Cut		
						0.7				Hard Silty Black Shale		
						2.0	2.3			Fracture of 36° 0.3 from top		
2-2-38	31	"	4373	4382	0.6	0.6				Hard Black Silty Shale		
2-2-38	32	" Soll	4382	4397	15.0	0.6				Hard Dark Brown to Black Shale		
							0.4			Soft Fine Silty Argillaceous Brown Oil Sand, mixed with mud		
						1.0	0.2			Hard Fractured and Broken Dark Brown to Black Silty Shale. Streaks of Fine Silty Argillaceous Oil Sand		
							0.3			Soft Fine Brown Oil Sand. Good Odor		
						0.2				Hard Dark Brown to Black Silty Shale. Dip 24°		
							1.5			Firm Soft Fine Brown Oil Sand. Good Odor		
							10.8			Firm Soft to Firm, Medium to coarse Brown Oil Sand, grading to coarse		
						1.8	13.2			Pebbly in bottom 4.0. Bottom 4.0 has a Grayish cast, probably due to Gray Pebbles. Good Odor and Amber Cut		
			4397	4398						Hole corrected for depth		
2-3-38	33	"	4398	4408	8.8		8.8			Firm Soft coarse Pebbly Brown Oil Sand with streaks of Fine Brown Oil Sand. Good Odor and Dark Amber Cut		
										Total Depth - 4408		

Henry E. Winters

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T1-33997

Los Angeles, Calif. March 30, 1938.

Mr. W. S. Eggleston,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T.4 S., R. 13 W., S.B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
F. J. Karmelich, Inspector, representative of the supervisor,
on March 20, 1938. There was also present E. Winter, Engineer, and
L. O. Mitchell, Driller.

Casing Record 13-3/8" cem. 757'; 8-5/8" cem. 4005';	Junk None.
W. S. O.; 6-5/8" liner landed 3843'-4408', c. p. 4344';	
perf. 4348'-4408'; T.D. 4408', plugged with cement	
4397'-4305'.	

The operations were performed for the purpose of testing the location and hardness of a cement plug proposed to be placed from 4408' to 4320' in the process of plugging back, and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 9:00 A. M. AND MR. WINTER REPORTED THE FOLLOWING:

1. The 6-5/8" liner was cleaned out to 4397'.
2. On March 18 and 19, 1938, 24 sacks of Victor oil well cement was dumped, beginning at 4397'.

THE INSPECTOR NOTED THAT the bailer could not be spudded below 4305' and brought up a sample of set cement.

The test was completed at 9:30 a. m.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 4305' ARE APPROVED.

cc- H. E. Winter
Long Beach
FJK:OH

R. D. BUSH

State Oil and Gas Supervisor

By *E. H. Harrison* Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-32183

Los Angeles, Calif. March 21, 1938

Mr. Ed Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your supplementary proposal to drill Well No. "OIL OPERATORS" 4,
Section 13, T4S., R. 13W., S. B. B. & M., Long Beach Field, Los Angeles County,
dated Mar. 18, 1938, received Mar. 21, 1938, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"The present condition of the well is as follows:

4408 deep

13-3/8" C 757'

8-5/8" C 4005' OK

565' 6-5/8" L 4408', inc. 60' perf. C. P. 4344'

Reperf. 4348-4399

The well has been tested on the pump since March 1, 1938 with an average daily production of
18 gross, 16 net, 21.7 gravity."

PROPOSAL:

"The proposed work is as follows:

1. C. O. to 4408 and plug with cement under hydrostatic head to 4320'.
2. Test plug by Division of Oil & Gas.
3. Perforate 6-5/8" casing 4133-4005.
4. Test on production."

DECISION:

THE PROPOSAL IS APPROVED.

cc- H. E. Winter
Long Beach

WJC:G

SWR.

R. D. BUSH

State Oil and Gas Supervisor

By

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 21 1938
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs, Cal. March 18, 19 38

Mr. E. Huguenin,

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

DEAR SIR:

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or altering casing~~ at well No. Oil Operators #4
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Long Beach Oil Field, Los Angeles County.

The present condition of the well is as follows:

4408 deep
13-3/8" C 757'
8-5/8" C 4005' OK
565' 6-5/8" L 4408', inc. 60' perf. C.P. 4344'
Reperf. 4348-4399

The well has been tested on the pump since March 1, 1938 with an average daily production of 18 gross, 16 net, 21.7 gravity.

The proposed work is as follows:

1. C.O. to 4408 and plug with cement under hydrostatic head to 4320'.
2. Test plug by Division of Oil & Gas.
3. Perforate 6-5/8" casing 4133-4005.
4. Test on production.

Respectfully yours

UNION OIL COMPANY OF CALIFORNIA

Name of Company or Operator

By

Henry E. Winter
District Engineer.

Address Notice to Deputy State Oil and Gas Supervisor in Charge of District Where Well is Located

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No. 2967

DIVISION OF OIL AND GAS

LOS ANGELES

Calif. 7/16 1938

Union Oil Company, Calif.

Name of Operator

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 45

R. 13 W - Long Beach B. & M., as herewith enumerated by well numbers.

Logs _____

History _____

Core record _____

Subsequent work see log - "Oil Operators" 4 - 7/3/38

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By W. J. Lugenauer

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-33847

Los Angeles, Calif. February 24, 19 38

Mr. Ed Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T. 4S., R. 13W., S. B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
F. J. Karmelich, Inspector, representative of the supervisor,
on Feb. 10,, 19 38. There was also present R. Rampton, Engineer, and
H. Robinson, Superintendent.

Casing Record <u>13-3/8" cem. 757'; 8-5/8" cem. 4005',</u>	Junk <u>None.</u>
<u>W. S. O.; 6-5/8" ld. 3837'-4408', c. p. 4344', perf.</u>	
<u>4344'-4408'. T. D. 4408', plugged with cement</u>	
<u>4344'-3951'.</u>	

The operations were performed for the purpose of demonstrating that fluid does not have access
to the well between the 8-5/8" and 6-5/8" casings,
and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 11:00 A. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. A 7-5/8" rotary hole was drilled from 4005' to 4408'.
2. On February 5, 1938, 565' of 6-5/8" - 26 lb. casing, including 60' of perforated, was landed at 4408' and was cemented through perforations at 4344' with 125 sacks of Victor oil well cement.
3. Cement was drilled out of the 8-5/8" and 6-5/8" casings from 3676' to 3951' (equivalent to 62 sacks) and the casing was cleaned out to 3951'.
4. On February 11, 1938, at 3:00 a. m., the fluid was bailed to 2535'.

THE INSPECTOR NOTED THE FOLLOWING:

1. No fluid entered the well while standing 8 hr. for test.
2. The fluid was located at 2535'.
3. The sample of fluid from bottom tasted fresh.
4. The hole was open to 3951'.

The test was completed at 12:00 noon.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED as indicating that fluid does not have access to the well between the 8-5/8" and 6-5/8" casings.

cc- H. E. Winter
Long Beach
FJK:G
S.A.R.

R. D. BUSH
State Oil and Gas Supervisor

By E. H. Gulamin Deputy

By _____ (CONTINUED ON PAGE 2) _____ Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
OR
Special Report on Operations Witnessed

No. T 1-33775
Page 2

UNION OIL COMPANY OF CALIFORNIA

Well No. "OIL OPERATORS" 4, Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.,

2. The fluid sample taken from the bottom of the drill pipe tasted fresh.
3. The recording pressure bomb chart was torn, but could observe that the valve had been opened.

The test was completed at 4:20 p. m.

THE SHUT-OFF IS APPROVED.

cc- H. E. Winter
Long Beach

CC:OH

R. D. BUSH

State Oil and Gas Supervisor

By *E. J. Ferguson* Deputy

629 South Hill Street
Los Angeles, California
January 18, 1938.

Union Oil Company of California,
Santa Fe Springs, Calif.

Gentlemen: Attention Mr. Henry E. Winter.

This will acknowledge receipt of and thank
you for your letter of January 13, 1938, giving the
elevation of well No. "Oil Operators" 4, Sec. 13,
T. 4 S., R. 13 W., S. B. B. & M., Long Beach field,
as 53.83' U. S. G. S.

We are correcting our records accordingly.

Yours truly,



Deputy Supervisor.

WJC:EMS

CC - Mr. R. D. Bush (2)
Long Beach

Changes Made as Follows	By Whom
Weekly Statements.....	
121.....	
P.C. & L.C. Cards.....	
Production Reports.....	
Well Records { Folders.....	
{ Reports.....	
Log Books.....	
Drawings.....	
Field Notes.....	

Union Oil Company of California

CARBON COPY

Santa Fe Springs, Calif. Jan. 13, 1938

Mr. E. Huguenin, Deputy Supv.,
Division of Oil & Gas,
Los Angeles, Calif.

Dear Sir:

The elevation of the Union Oil
Company well "Oil Operators #4", in the Long
Beach Field, (Section 13, 4-S, 13-7), is 53.88
U.S.C.S.

The location is the same as
in the original notice to drill.

Very truly yours,

Henry E. Winter
District Engineer.

HEW:S

Union Oil Company of California

PRODUCERS AND REFINERS OF
CRUDE OIL, FUEL OIL, ROAD OIL AND ASPHALT,
UNION GASOLINE, KEROSENE AND DISTILLATE,
'RED LINE' LUBRICATING OILS AND GREASES.

DIVISION OF OIL AND GAS
RECEIVED
JAN 14 1938
LOS ANGELES, CALIFORNIA

Santa Fe Springs, Calif. Jan. 13, 1938

Mr. E. Huguenin, Deputy Supv.,
Division of Oil & Gas,
Los Angeles, Calif.

Dear Sir:

The elevation of the Union Oil
Company well "Oil Operators #4", in the Long
Beach Field, (Section 13, 4-S, 13-W), is 53.88
U.S.G.S.

The location is the same as
in the original notice to drill.

Very truly yours,

Henry E. Winter
District Engineer.

HEW:S

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T. 1-33680

Los Angeles, Calif. January 20, 19 38.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 4 Sec. 13, T. 4 S., R. 13 W., S. E. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by

F. J. KARMELICH, representative of the supervisor,
on January 4, 1938. There was also present R. Rampton, Engineer,

F. T. Shores, Driller.

Casing Record 18-5/8" cem. 50'; 13-3/8" cem. 757'; Junk XXXX
T. D. 758'.

The operations were performed for the purpose of demonstrating that the known surface waters are
adequately protected.

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 4:00 P. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. A 17" rotary hole was drilled from 50' to 758'.
2. 757' of 13-3/8" - 45 lb. casing was run into the hole to 757'.

THE INSPECTOR NOTED THE FOLLOWING:

1. The 13-3/8" casing was cemented at the reported depth of 757' with 350 sacks of Velo 24 hour cement.
2. The cement was displaced from the casing with 673 cubic feet of drilling fluid.
3. The final pressure was 500 lb.

The operations were completed at 4:42 a. m.

THE CEMENTING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT THE KNOWN SURFACE WATERS ARE ADEQUATELY PROTECTED.

cc- H. E. Winter
Long Beach
FJK:OH

R. D. BUSH

State Oil and Gas Supervisor

By

E. J. Jussen Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P1-31816

Los Angeles, Calif. December 23, 1937.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

"OIL OPERATORS"

Your _____ proposal to drill Well No. 4,

Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,

dated Dec. 20, 1937, received Dec. 21, 1937, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"The well is 965 feet N-W'ly along the center line of Pacific Electric R.R. from the intersection with the center line of Bixby Road (Proj.) and thence 289' S-W'ly at right angles. The elevation of the derrick floor above sea level will be determined later (Approx. ~~54'~~). We estimate that the first productive oil or gas sand should be encountered at a depth of about ~~522.88~~ feet." *53.88' U.S.G.S. (Correction letter 1-18-38)

PROPOSAL:

"We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing	Weight	Grade and Type	Depth	Landed or Cemented
13-3/8	46#	New	700	Cemented
8-5/8	36#	New	4000	Cemented
6-5/8 liner	26#	New	4400	Cemented

The 6-5/8" liner to be a combination splice liner to be cemented through perforations at the base of the "JK" shale

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

- (a) Mud fluid of not less than 70 lb. per cubic foot shall be used in the drilling of the well and the column of mud fluid shall be maintained at all times to the surface, particularly while pulling the drill pipe.
(b) Adequate blow-out prevention equipment shall be provided and ready for operation at all times.
- Any hole to be sidetracked at any time during the drilling of this well shall be completely filled with cement.
- The formations to be left back of the 8-5/8" casing shall be mudded in a manner consistent with good drilling practice.
- This division shall be notified to examine cores and/or electrical log before running the 8-5/8" casing.
- THIS DIVISION SHALL BE NOTIFIED TO WITNESS:**
 - The cementing of the 13-3/8" surface casing.
 - A test of the effectiveness of the 8-5/8" shut-off.
 - A test after drilling out the cement to within 50' of the cementing point to demonstrate that no fluid has access to the well between the 8-5/8" and 6-5/8" casings.

R. D. BUSH

State Oil and Gas Supervisor

cc- H. E. Winter
Long Beach
WJC:OH

By E. Augustin Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
DEC 21 1937
LOS ANGELES, CALIFORNIA

Notice of Intention to Drill New Well

This notice must be given and surety bond filed before drilling begins

General Exploration Co.

037-06415

Santa Fe Springs, Calif. Dec. 20, 1937

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of drilling well No. "Oil Operators" 4, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M., Long Beach Field, Los Angeles County.

Lease consists of N-W'ly along the center line of Pacific Electric R.R. from the intersection with the center line of Bixby Road (Proj.)
The well is 965 feet N. of S., and feet E. or W. from and thence 289' S-Wly at right angles
(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the derrick floor ~~Will be determined later~~ (Approx. 54') 53.88' U.S.G.S. above sea level is feet. (Correction letter 1-18-38)

We estimate that the first productive oil or gas sand should be encountered at a depth of about feet.

We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing, Inches	Weight, Lb. Per Foot	Grade and Type	Depth	Landed or Cemented
13-3/8	46#	New	700	Cemented
8-5/8	36#	New	4000	Cemented
6-5/8 liner	26#	New	4400	Cemented
The 6-5/8" liner to be a combination splice liner to be cemented through perforations at the base of the "UK" shale				

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing.

Address Santa Fe Springs

UNION OIL COMPANY OF CALIFORNIA,

(Name of Operator)

Telephone number Whittier 426-87

By Henry E. Winter
District Engineer

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

20
SAR
Book.
SAR.
12-21-37.

SCHLUMBERGER ELECTRICAL LOGS

ELECTRICAL
1-267
COMPANY DATE Dec. 2,
sh LOCATION :

COMPANY UNION OIL COMPANY DATE Dec. 2, 1937

WELL (GEN.) C.R.G. Properties, Ltd

Casing shoe
Bottom

Max. depth	ell	h
Max. footage measured (p or s)	mi	M

Footage missed _____ ft. Total time incurred by run _____ h.

NATURE : natural VISCOSITY : 20 LEVEL :

DENSITY : 72 RESISTIVITY : 0.2

DIAMETER OF HOLE	Copper Sulfate	Cards	Factor	
			10	100
7-5/8"				

REMARKS

REMARKS
 Horizo: 50"

Figure 1 is a line graph showing the number of cases of COVID-19 in the United States from March 2020 to March 2021. The y-axis is labeled 'Number of cases' and ranges from 0 to 1,000,000. The x-axis is labeled 'Date' and shows months from March 2020 to March 2021. The graph shows a sharp increase in cases starting in March 2020, peaking in May 2020 at approximately 1,000,000 cases, followed by a decline and then a second, smaller peak in November 2020 at approximately 200,000 cases. Cases then decline again, with a small uptick in March 2021.

ELECTRICAL

ELECTR

3 ELEVATION

765

Footage missed 4 ft. Total time incurred

DIAMETER OF HOLE

12 1/2" to 3
7-5/8" be

REMARKS

Review:

1. 本行在 2019 年 12 月 31 日及 2019 年 12 月 31 日前的 12 个月内，未发生任何重大违法违规行为，未受到任何行政处罚，未发生任何重大诉讼、仲裁事项，未发生任何重大资产减值事项，未发生任何重大损失事项，未发生任何重大风险事项，未发生任何重大关联交易事项，未发生任何重大担保事项，未发生任何重大投资事项，未发生任何重大融资事项，未发生任何重大重组事项，未发生任何重大并购事项，未发生任何重大资产处置事项，未发生任何重大股权转让事项，未发生任何重大增资事项，未发生任何重大减资事项，未发生任何重大回购事项，未发生任何重大股权激励事项，未发生任何重大员工薪酬事项，未发生任何重大福利事项，未发生任何重大培训事项，未发生任何重大招聘事项，未发生任何重大解聘事项，未发生任何重大劳动关系事项，未发生任何重大劳动争议事项，未发生任何重大劳动纠纷事项，未发生任何重大劳动诉讼事项，未发生任何重大劳动仲裁事项，未发生任何重大劳动赔偿事项，未发生任何重大劳动补偿事项，未发生任何重大劳动安置事项，未发生任何重大劳动保险事项，未发生任何重大劳动福利事项，未发生任何重大劳动保护事项，未发生任何重大劳动安全事项，未发生任何重大劳动卫生事项，未发生任何重大劳动纪律事项，未发生任何重大劳动规章事项，未发生任何重大劳动合同事项，未发生任何重大劳动合同事项，未发生任何重大劳动合同变更事项，未发生任何重大劳动合同解除事项，未发生任何重大劳动合同终止事项，未发生任何重大劳动合同续订事项，未发生任何重大劳动合同履行事项，未发生任何重大劳动合同违约责任事项，未发生任何重大劳动合同争议事项，未发生任何重大劳动合同诉讼事项，未发生任何重大劳动合同仲裁事项，未发生任何重大劳动合同赔偿事项，未发生任何重大劳动合同补偿事项，未发生任何重大劳动合同安置事项，未发生任何重大劳动合同保险事项，未发生任何重大劳动合同福利事项，未发生任何重大劳动合同保护事项，未发生任何重大劳动合同安全事项，未发生任何重大劳动合同卫生事项，未发生任何重大劳动合同纪律事项，未发生任何重大劳动合同规章事项，未发生任何重大劳动合同合同事项，未发生任何重大劳动合同变更事项，未发生任何重大劳动合同解除事项，未发生任何重大劳动合同终止事项，未发生任何重大劳动合同续订事项，未发生任何重大劳动合同履行事项，未发生任何重大劳动合同违约责任事项，未发生任何重大劳动合同争议事项，未发生任何重大劳动合同诉讼事项，未发生任何重大劳动合同仲裁事项，未发生任何重大劳动合同赔偿事项，未发生任何重大劳动合同补偿事项，未发生任何重大劳动合同安置事项，未发生任何重大劳动合同保险事项，未发生任何重大劳动合同福利事项，未发生任何重大劳动合同保护事项，未发生任何重大劳动合同安全事项，未发生任何重大劳动合同卫生事项，未发生任何重大劳动合同纪律事项，未发生任何重大劳动合同规章事项，未发生任何重大劳动合同合同事项。

1. The first step in the process of identifying a problem is to define the problem. This involves identifying the symptoms and the underlying causes of the problem. Once the problem has been defined, the next step is to identify the stakeholders who are affected by the problem. This involves identifying the individuals, groups, and organizations that have an interest in the problem. The third step is to identify the resources that are available to address the problem. This involves identifying the people, money, and other resources that can be used to solve the problem. The fourth step is to develop a plan of action. This involves identifying the steps that need to be taken to solve the problem. The fifth step is to implement the plan. This involves putting the plan into action. The sixth step is to evaluate the results. This involves assessing the effectiveness of the plan and making adjustments as needed. The seventh step is to communicate the results. This involves sharing the results of the process with the stakeholders. The eighth step is to monitor the results. This involves keeping track of the results over time and making adjustments as needed. The ninth step is to report the results. This involves providing a report on the results of the process to the stakeholders. The tenth step is to review the process. This involves reflecting on the process and identifying areas for improvement.

[illegible]

Witnessed By : Mr. Hagstead - Mr. Winter

[illegible]

50

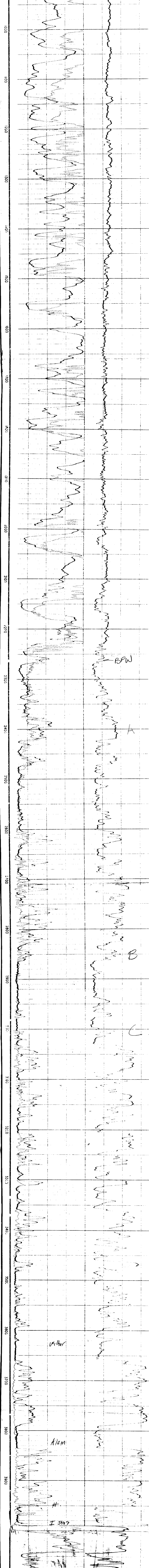
[illegible]

Figure 1 is a line graph showing the relationship between the number of days of exposure to a 12-hour shift and the number of days of exposure to a 12-hour shift. The x-axis is labeled 'Days of exposure to a 12-hour shift' and ranges from 0 to 10. The y-axis is labeled 'Days of exposure to a 12-hour shift' and ranges from 0 to 10. The data points show a positive correlation, with a fitted curve passing through the points.

Figure 1 is a line graph with the X-axis labeled 'Number of days since the start of the study' ranging from 0 to 10, and the Y-axis labeled 'Number of days since the last rainfall' ranging from 0 to 10. The data points are plotted as black dots, showing a positive correlation. A solid line represents the fitted curve, which starts at approximately (0, 0.5) and rises to approximately (10, 8.5). The data points are as follows:

Number of days since the start of the study	Number of days since the last rainfall
0	0.5
1	1.5
2	2.5
3	3.5
4	4.5
5	5.5
6	6.5
7	7.5
8	8.5
9	9.5
10	10.5

Age Group	Percentage of respondents
18-29	~65%
30-49	~75%
50-69	~80%
70+	~85%



SCHLUMBERGER

WELL SURVEYING CORPORATION

C.R.G. Properties, Ltd. CALIFORNIA

COMPANY: UNION

FIELD: RECEIVED Long B

AUG 28 1941

WELL: 011 Op

LOS ANGELES, CALIFORNIA

SEC: T R

COUNTY: Los Angeles

STATE: California

ELEV.: 53.88 U.S.G.S.

Sec. 13-4S-13W.

"Oil Operators" 3

(037-06496)

Beach
rators #3
s Angeles
7-1429
7-1443

UNION OIL CO.

RUN	D-1	D-2	3	4	5
Date	8-21-41	8-25-41			
Csg. shoe	3986'	3986'			
Total depth	5200'	5450'			
Depth rchd.	5198'	5450'			
Ft. Meas.	1212'	252'			
Mud: Nat.	Chemical	Chemical			
Dens	73.8	74			
Visc.	43	41			
Res.	2.6@ 86°F	3.1@ 91°F			
Max. Temp.	166°F	144°F			
Meas. from	table	table			
Tension	1700#				
Rig. Time	1 1/2 hrs.	1-3/4 hr.			
Mileage	10	10			
Observer	V.T. Fant	V.T. Fant			
Witnessed by:	Winter	Winter			

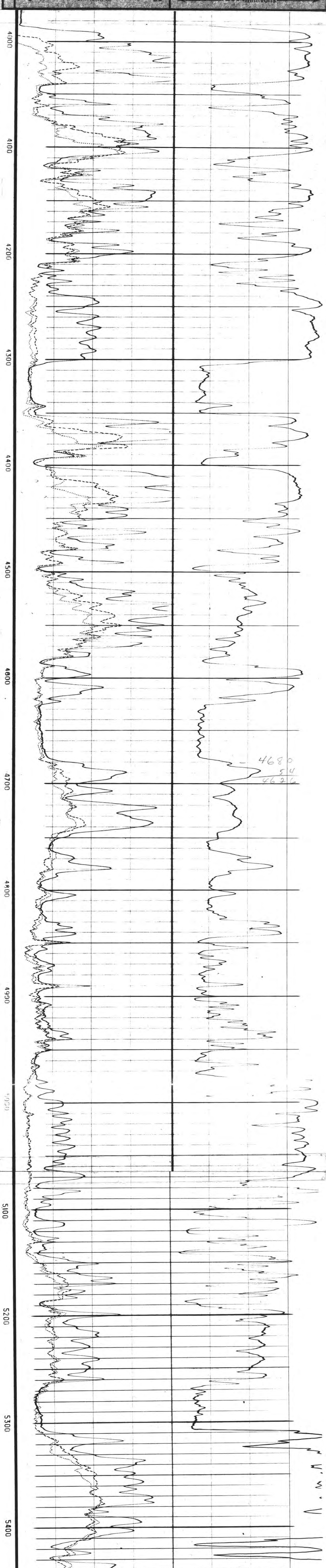
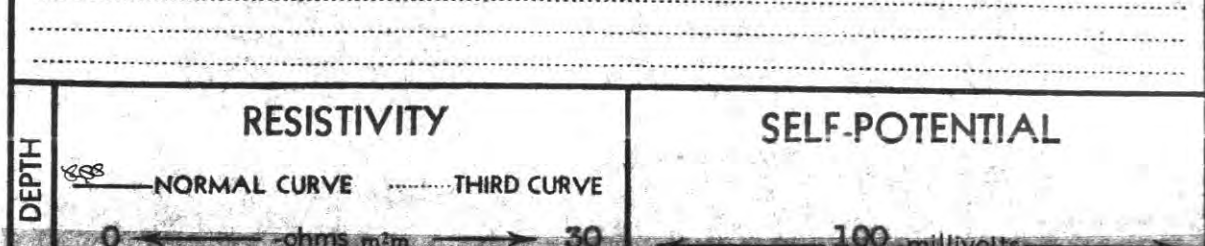
DIAMETER OF HOLE

7-5/8"

REMARKS

Device: Standard 3rd curve -----

Long device 3rd curve



Union Oil Co.
Oil Operators #3
Long Beach



Temperature Survey

WELL: 8-3

COMPANY: CRG Properties, LTD.
FIELD: Long Beach
COUNTY: Los Angeles STATE: CA

WELL DATA

DATE: 4-26-2005
TYPE LOG: TEMP
TOTAL DEPTH:
GDA: 2,943'
TOP LOGGED INTERVAL: 0'
FLUID LEVEL: 775'
PKR DEPTH:
PLUG BACK DEPTH:
RECORDED BY: John Reece

CASING: 8.625"
TUBING:
TOP PERFORATION: 4,091'
BOFW: 2,100'
LINE SPEED: 30 ft/min
DF above Mat: 0'
API: 03706496

EQUIPMENT AND TEST DATA

PRESSURE TBG psi:
PRESSURE CSG psi: 43
WELL STATUS: Static
TRUCK No: 1
TOOL SIZE: 1 1/4"

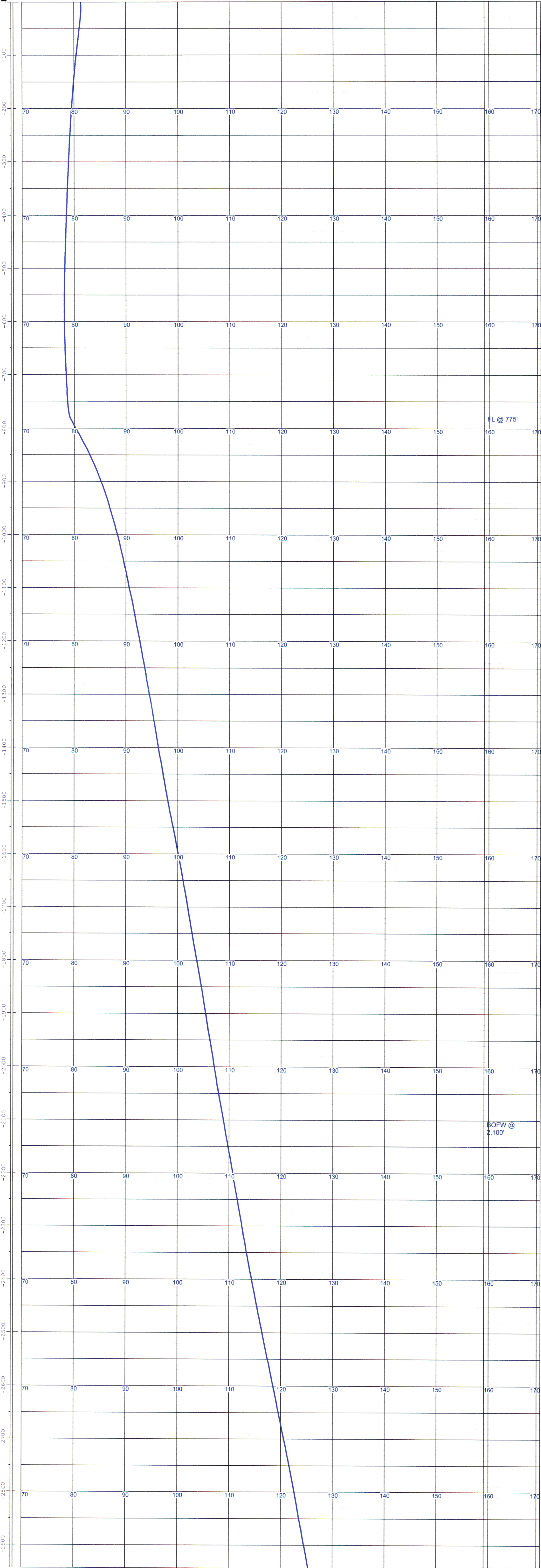
TOOL DATA

CALIBRATED TEMP RANGE:-0.9-253.9deg F
ACCURACY RESOLUTION: 0.25% FS
RESOLUTION: 0.002% FS
COMMENTS: MAX BH TEMP 126.44 F

DEPTH, ft

Temperature

Temperature
(Fahrenheit)



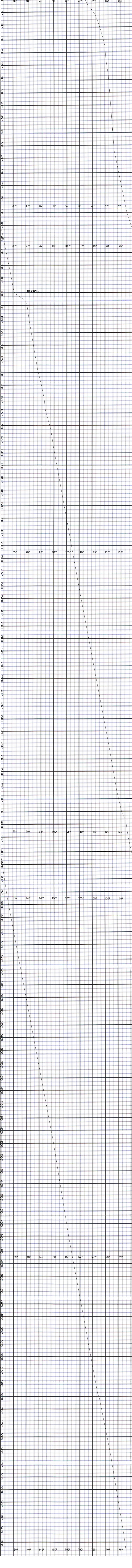
Company: CRG PROPERTIES, LTD.
Log Type: STATIC TEMPERATURE SURVEY
Date: 02-18-2008
Log Sheet: 01 of 01
Log Phase: 0 - pre
Clog Phase: CLOGGED, 250 psi
Clog Size: 5/16" - 1/2"
Operator: Gary Adams - Truck #77
Logged Interval: 0-5625

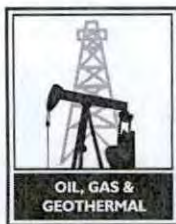
Field/LONG BEACH
Permit No: 4574533

SEC 13 TWP 4S RGE 13W
APN 0403706295
Well No: NW1B1 8-3

8.58' 364 0 5130
5.12' 15.54 3343 896
PUG DEPTH: 596'

STATIC TEMPERATURE SURVEY





DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 100 Cypress, CA 90630-4731
Phone:(714) 816-6847 Fax:(714) 816-6853
REPORT OF WELL ABANDONMENT

Cypress, California
March 27, 2017

Mr. Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

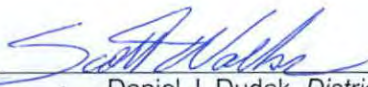
Your report of abandonment of well "**Nwlbu**" 8-3, A.P.I. No. **037-06496**, Section **13**, T. **04S**, R. **13W**, **SB** B.&M., **Long Beach** field, **Los Angeles** County, dated **12/15/2013**, received **1/8/2014**, has been examined in conjunction with records filed in this office. We have determined that the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records. The plugging and abandonment of the well is **approved**.

The determination of this well plugging and abandonment is based on the following information, consistent with California Public Resources Code (PRC), and the California Code of Regulations (CCR):

1. Surface plugging completed on 12/2/2013.
2. Site inspection made and approved on 12/19/2013.

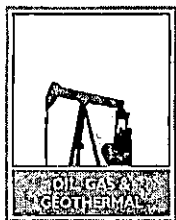
Kenneth A. Harris Jr.

State Oil and Gas Supervisor

By 
For Daniel J. Dudak, District Deputy

EPM:epm

cc: Long Beach Dept. of Gas & Oil



DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630-4731
Phone: (714) 816-6847 Fax: (714) 816-6853
REPORT OF WELL ABANDONMENT

Cypress, California
May 21, 2014

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your report of abandonment of well "Nwlbu" 8-3, A.P.I. No. 037-06496, Section 13, T. 04S, R. 13W, SB B.&M., Long Beach field, Los Angeles County, dated 12/12/2013, received 2/4/2014, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

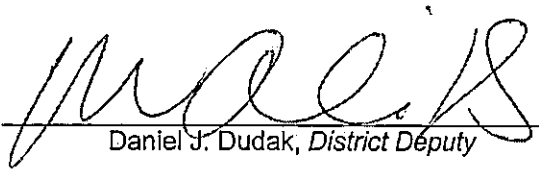
NOTE: 1. Surface plugging completed on 12/2/2013.
2. Site inspection made and approved on 12/19/2013.

EM:kj

cc:Update

Pat Perez
Acting State Oil and Gas Supervisor

By


Daniel J. Dudak, District Deputy

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

SITE RESTORATION MEMO

Operator: C.R.G Properties, Ltd Well "NWLB" 8-3
 API No. 037-06496 Sec. 13 T. 045 R. 13W SB B&M
 Field Long Beach County Los Angeles Date 3/21/2014
 Mr. / Ms. Abdulmageed (AB) Abdulrahman representative of the supervisor, was present 1000 to 1200

There were also present: Mick Beyer of AllenCo

Contact Number: (310) 505-9787

Email:

Surface location description:

The property at 712 W. Baker Street (Baker Street / Golden Street.) The property can be accessed near intersection of Magnolia Ave. and Wardlow Rd

Date of Abandonment/Re-Abandonment: 11/01/2013

	Approved	Not Approved	Corrected	Comments
Well Accessibility	☒	☐	☐	Not obstruction as of the date of the inspection
Oil & Gas Field Equipment Removed	☒	☐	☐	
Oil Field Related Waste/Refuse Removed	☒	☐	☐	
Well Cellar Removed	☒	☐	☐	
Operation Sumps Removed	☐	☐	☐	Not Applicable
Visible Surface Oil Contamination Removed	☒	☐	☐	
Oil Field Related Power Pole(s) Removed	☒	☐	☐	
Tank(s) Removed	☒	☐	☐	
Surface Pipeline(s) Removed	☒	☐	☐	
Pad(s) Removed	☒	☐	☐	

Photos Taken For the Final Inspection:

See the following photos.

Number of deficiencies: N/A Deficiency Letter Date: _____ Deficiency Letter Number: _____

Photos attached to well file: Yes ☒ No ☐

The inspection as witnessed and reported is approved. Yes ☒ No ☐

By: Abdulmageed G. Abdulrahman

Date: 6/17/2014

All equipment, pipeline, casing or junk were removed from the site. All liquid wastes were removed and properly disposed. Excavations filled with earth and compacted properly to prevent settling.

Additional description of site restoration: _____

Description: _____







03/21/2014 10:47

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST – RECORDS RECEIVED AND WELL STATUS

Company:	C.R.G. Properties, LTD	Well: NWLBU 8-3
API#:	037-06496	Sec. 13, T. 4S, R.13W. S. B. B. & M.
County:	Los Angeles	Field: Long Beach

RECORDS RECEIVED	DATE	STATUS	
Well Summary (Form OG100)	2/4/2014 (2)	Active	☐ Drilling ☐
History (Form OG103)		Abandoned	☒ Idle ☐
Core Record (Form OG101)		Reabandoned	☐ Other ☐
Directional Survey			
Sidewall Samples			
Date final records received.			
Electric Logs:			
Other:			
		WELL TYPE	
		Oil	☒ Waterflood ☐
		Gas	☐ Water Disposal ☐
		Water Source	☐ Cyclic Steam ☐
		Observation	☐ Steam Flood ☐
		Exploratory	☐ Fire Flood ☐
		Dry Hole	☐ Other ☐
		EFFECTIVE DATE: 12/2/13	
		REMARKS: Abandoned	

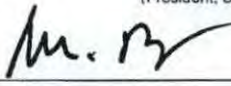
ENGINEERS CHECK LIST		CLERICAL CHECK LIST
☒	Summary, History & Core Record (Dupl.)	Location change
☐	Electric Log	Elevation change
☒	Operator's Name	Form OGD121
☒	Signature	Form OGD150b (Release of Bond)
☒	Well Designation	Duplicate logs to archives
☐	Location	Notice of Records Due
☐	Elevation	EDP MC 5-15-14
☒	Notices	District Date Base
☒	"T" Reports	Final Letter (OG159) 5-21-2014
☒	Casing Record	Update Center MC 5-15-14
☒	Plugs	
☐	Directional Survey	
☐	Production/Injection (FAP Codes: 412-03-00)	
☐	E Well on Prod., enter EDP	
☒	Surface Inspection Required 12/19/13 ok	FIELD CHECK LIST
☐	Surface inspection Waived (Island)	Date Surface Inspection Completed: 12/19/13 BFD
☐	Well site restoration deferred (common cellar)	Other:
☒	Final Letter Required AB: ☒ REAB: ☐	
☐	Other:	

RECORDS NOT APPROVED	RECORDS APPROVED
(Reason:)	(Signature) E.M. Andrews
	RELEASE BOND
	Date Eligible
	(Use date last needed records received.)
	MAP AND MAP BOOK

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RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
HISTORY OF OIL OR GAS WELL

Operator C.R.G. Properties, LTD Field Long Beach County Los Angeles
Well "NWLBU" 8-3 Sec. 13 T. 04S R. 13w sbB.&M.
A.P.I. No. 037-06496 Name Mick Beyer Title Operations Manager
(Person submitting report) (President, Secretary, or Agent)
Date 12-12-13
(Month, day, year)

Signature 

Address 2109 Gundry Ave. Signal Hill, Ca. 90755

Telephone Number 562 989-6100

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

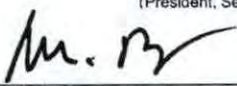
11-08-13	M.I.R.U. - Installed and tested BOPE-Witnessed by C. Cullum w/DOGGR - Secured Well
11-11-13	R.I.H. 5 1/2" Scraper tagged dn. @ 5842' = 104' above clean out depth - Circ. with water w/returns of oily water and gas - P.O.H. Witnessed by M. Okafor & Z. Amilhussin w/ DOGGR - Secured well
11-12-13	R.I.H. W/Tbg. cleaned out scale and fine sand from 5842' to 5900' unable to work deeper - Secured well
11-13-13	W/Tail at 5900' mixed and pumped 247 cu/ft (217 sxs) class G cement - P.O.H. - Witness by Secured well
11-14-13	R.I.H. Tagged cement plug at 4067' - Pumped 15 bbls. 73# mud - R.I.H. W/ 5/8" Scraper to 3043' - TLH - P.O.H. - R.I.H. - Tbg. - Witnessed by Secured well
11-15-13	W/tbg. Tail at 3875' Mixed and pumped 212 cu/ft. (186 sxs) class G cement - P.O.H. Witnessed by T. Tyler w/DOGGR - Secured well.
11-18-13	R.I.H. Tagged cement plug at 2773' - Tested casing at 1000 psi - Good - Pumped 25 bbls. of 73# mud P.O.H. - R.I.H. Shot perforations from 2450' to 2440' - P.O.H. - R.I.H. w/ Tbg. Tail at 2450' Established break down at 1.5 bbls/min. @ 800 psi. Mixed and Pumped 203 cu/ft (178 sxs) class G cement Squeezed away 107 cu/ft. (94 sxs) Witnessed by W/ DOGGR - secured well
11-19-13	R.I.H. Tagged cement 2171' - Pumped 120 bbls, 73# mud - P.O.H. - Shot perforation from 210' to 200' - R.I.H. W/tbg. Tail at 210' mixed and pumped 209 cu/ft. (183 sxs) class G cement - cement returns from 8 5/8" & 13 3/8" csg. - cement to surface inside and outside - P.O.H. - Witnessed by T. Tyler - R.D.M.O.
11-25-13	Dug down around well and cut casing 5' below surface - Found cement low inside 10' and outside 20' - Secured well
12-03-13	Topped off casing's with 36 c.f. (31 sxs) class G cement - E. Tabor w/DOGGR witnessed
12-04-13	Surface tag and welding of I.D. Plate Witnessed by P. Kaufman - Backfilled well location - Job complete.



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RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
HISTORY OF OIL OR GAS WELL

Operator C.R.G. Properties, LTD Field Long Beach County Los Angeles
Well "NWLBU" 8-3 Sec. 13 T. 04S R. 13w sbB.&M.
A.P.I. No. 037-06496 Name Mick Beyer Title Operations Manager
(Person submitting report) (President, Secretary, or Agent)
Date 12-12-13
(Month, day, year)

Signature 

Address 2109 Gundry Ave. Signal Hill, Ca. 90755

Telephone Number 562 989-6100

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

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CEMENTING/PLUGGING MEMO

T 114-0060 KMA 12/3/13

Operator CRG Properties Well No. "Nwlbu" 8-3
 API No. 037-06496 Sec. 13 T. 04S R. 13W S.B. B&M
 Field Long Beach County Los Angeles On 12-4-13
 Mr. / Ms. J. Collender representative of the supervisor, was present from 1115 to 1130

There were also present Mr. Tim Parker (Allenco)

Casing record of well: 13 3/8" cem 765', cp 200'; 8 5/8" cem 3986', drilled thru 3139', cp 2,440'; 5 1/2" Id 3043'-5964', cp 4393',
 4487 perfs 4488-5827'. TD (present hole) 6540'. Plugged w/ cem 6540'-5964', 5878'-4067', 3875'-2773', 2450'-2171', 210'-6.5'.

The operations were performed for the purpose of Abandonment

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ are approved.

Hole size: 17 " fr. 0 ' to 765 ' , 12 1/4 " to 3139 ' & 7 5/8 " to 6540 ' ,

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
8 5/8"	36#	0'	3,986'	11/18/13	tbq@ 2,450'	200 cf	2174'	2171'	114 cf	700 psi	2,440'-2,450'
13 3/8"	46#	0'	210'	11/19/13	tbq@200'	103 cf	0	29.5'	26 cf	--	200'-210'

Casing/tubing recovered: " Shot/cut at ' , ' , ' Pulled fr. ' ;
 " Shot/cut at ' , ' , ' Pulled fr. ' .

Junk (in hole):

Hole fluid (bailed to) at ' . Witnessed by

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
83/25	11/14/13	25	4067'		3,875'	C. L. Cullum
73/ 26	11/18/13	27	2,773'		2,318'	Z. Amilhussin
73/40	11/19/13	120	2,018'		1,971'	T. Tyler

Note (12) Class II 3M; 11/08/13; C. Welty

C/O 5900' w/ 20,000# @ 1200 11/12/13 PK

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
11-13-13	247 cf	Tbg 5878'	0900	WM Flores	4067'	4000#	11/14/13 0715	C.L.Cullum
11-15-13	212 cf	Tbg@ 3875'	0830-1045	T. Tyler	2,773'	2,000#	11/18/13 0715	Z. Amilhussin
11-18-13	210 cf	Tbg@ 2450'	1300	Z. Amilhussin	2171'	2,000#	11/19/13 0715	T. Tyler
11-19-13	73sx/84 cf	Tbg@200'	1425-1500	T. Tyler	29.5	---	----	----
12/2/13	36 cf	Top 29.5	1030	E. Tabor	6.5'	visual	12/4/13 1115	J. Collender

* 6 stages with tbq raised from 5878' through 4313'

Andrews, Kathleen@DOC

From: Moser, Ellen@DOC
Sent: Tuesday, November 12, 2013 12:53 PM
To: Andrews, Kathleen@DOC
Subject: FW: Well Abandonment Nwlbu 8-3

Mick wants a variance to start cementing at 5900'.

From: Mick Beyer [<mailto:mbeyer@allencoca.com>]
Sent: Tuesday, November 12, 2013 12:34 PM
To: Moser, Ellen@DOC
Subject: Well Abandonment Nwlbu 8-3

Ellen,

We tagged fill at 5842' cleaned out with water down to 5900' (we had no solid returns to surface, it seemed like cement steamers) we are hitting hard at this depth. Well history is showing cement plug at 5964' it seems we are hitting it at 5900'. We would like approval to start are cement plug at 5900'

Note; On well 9-4 we tagged hard at 9125' when clean out depth was 9151' DOGGR Allowed us to cement at 9125'
Note; On well 9-5 we tagged fill at 9410' cleaned out hard to 9420' when clean out depth was at 9454' DOGGR Allowed us to cement at 9420'

Sincerely,

Mick

Mick Beyer, Operations Manager

mbeyer@allencoca.com

AllenCo

2109 Gundry Avenue

Signal Hill, CA 90755

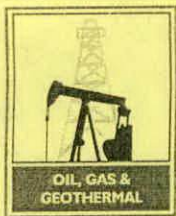
Phone: 562-989-6100

FAX: 562-989-6104

Cell: 310-505-9787

www.allenco-oilwellservice.com

Telecon w/M. Beyer - gravel-sized chunks of cement had been brought up for some time with well fluids when circulating. Then brought up chunks of cement. Fill at 5900' is hard, push on w/20K#. Okayed to cement. Allenco will use 8 5/8" scraper to liner top, then circulate before placing mud. KMA 11/12/13.
11/14/13 Okayed change in program to place one plug from 3875' to 2800'. KMA



REPORT ON OPERATIONS

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Cypress, California
January 24, 2014

Your operations at well "Nwlbu" 8-3, A.P.I. No. 037-06496, Sec. 13, T. 04S, R. 13W, SB B.&M., Long Beach field, in Los Angeles County, were witnessed on 11/8/2013, by Jack Collender, a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION: **APPROVED**

NOTE: The required Class 112M blowout prevention equipment was inspected and approved on 12/4/2013.

DEFICIENCIES NOTED AND CORRECTED: NONE

KMA:dt

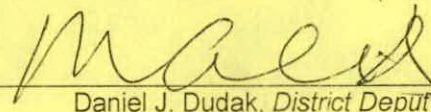
cc: Update

Tim Kustic

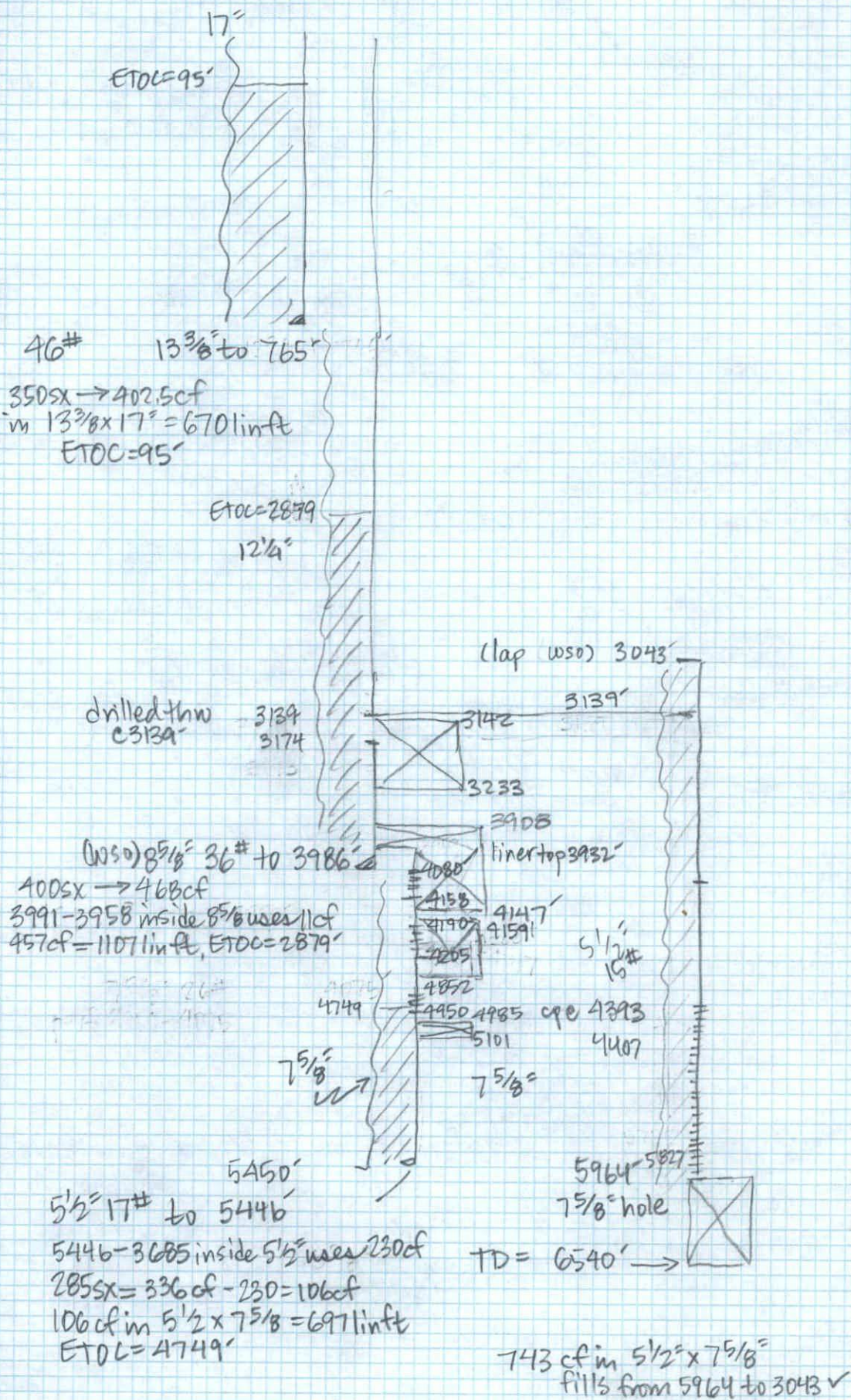
State Oil and Gas Supervisor

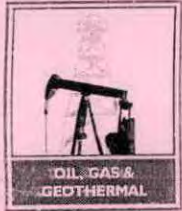
By:

For:


Daniel J. Dudak, District Deputy

037-06496
"NWibu" 8-3





NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

PERMIT TO CONDUCT WELL OPERATIONS

CRITICAL WELL

No. P 113-0596

Old	New
412	412
FIELD CODE	
03	03
AREA CODE	
00	--
POOL CODE	

Cypress, California
July 15, 2013

Mr Mark Pender, Agent
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your proposal to **Abandon** well "**Nwlbu**" 8-3, A.P.I. No. **037-06496**, Section **13**, T. **04S**, R. **13W**, **SB B. & M., Long Beach** field, **Northwest Extension** area, **Brown** pool, **Los Angeles** County, dated **7/10/2013**, received **7/10/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

- Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
 - Class **II3M**, with hydraulic controls, during **abandonment** operations.
 - A **3M lubricator** for **wireline** operations.
- Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
- Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
- All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of **72** lbs/cu.ft and a minimum gel shear strength of **25** lbs./100 sq. ft.
- Prior to shooting any perforations for braidenhead squeezes, a pressure test of the **8-5/8"** casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
- The well location shall be surveyed prior to burying the well, and the survey shall be filed with this office. Latitude and longitude shall be in decimal degrees, to six decimal places, in NAD83.
- All casing must be removed from between 5' and 10' below ground level.
- Well site restoration shall be completed within 60 days following the completion of plugging operations.
- No program changes are made without prior Division approval.
- THIS DIVISION SHALL BE NOTIFIED TO:**
 - Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.
 - Witness the clean-out depth at **6540'**.

(Continued on page 2)

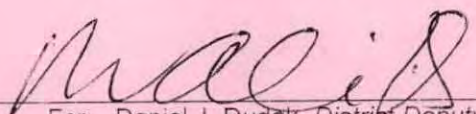
No Bond Required

cc: Update
EDP
AllenCo.
DOGGR - Dist. 1 (Cypress)

Engineer Ellen Plaza Moser
Office (714) 816-6847

EPM/epm

Tim Kustic
State Oil and Gas Supervisor

By 
For: Daniel J. Dudak, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

- c. Witness the placing, location and hardness of the cement plug from **6540'** to **4193'**.
- d. Witness the mudding operations.
- e. Witness the placing, location and hardness of the cement plug from **3875'** to **3675'**.
- f. Witness the placing, location and hardness of the cement plug from **3043'** to **2800'**.
- g. Witness a pressure test of the **8-5/8"** casing.
- h. Witness the cement squeeze through the **perforations** at **2440'** through a retainer or packer (if casing integrity is not demonstrated).
- i. Witness the placing, location and hardness of the cement plug from **2450'** to **2190'**.
- j. Witness the cement squeeze through the **perforations** at **210'** through a retainer or packer (if casing integrity is not demonstrated).
- k. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- l. Inspect the restored well site.

NOTE:

- 1. Upon completion of the proposed work, a History of Oil or Gas Well (form OG103) shall be submitted to this office.
- 2. The well abandonment history (History of Oil or Gas Well - form OG103), must include a description of the removal or abandonment of the well flowline and any associated piping.
- 3. Hydrogen sulfide gas (H₂S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
- 4. The operator shall isolate the following zones:
 - a. **Base of the Freshwater Sand at 2260'.**
 - b. **Top of the Upper Gas Zone at 2400'.**
 - c. **Top of the Wilbur Zone at 3000'.**
 - d. **Top of the Alamitos Zone at 3875'.**
 - e. **Top of the Brown Zone at 4680'.**

Failure to achieve adequate zonal isolation may have negative impacts on current and future operations. In addition, failure to achieve adequate zonal isolation will also be noted on the Report of Operations (OG 109).



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

DG/EM

FORM 113-0596

FOR DIVISION USE ONLY		
Bond	Forms	
	OGD114	OGD121
BB	7/13/13	7/10/13

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ well "Nwibu" 8-3, API No. 037-06496

(Check one)
Sec. 13, T. 4s, R. 13w, S.B. B.&M., Long Beach Field, Los Angeles County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

See Attachment

The total depth is: 6540 feet. The effective depth is: 5964 feet.
Present completion zone(s): see attachment (Name) Present zone pressure: N/A psi.
Oil or gas shows: see attachment (Name and depth) feet. Depth to base of fresh water: 2260 feet.
Top of uppermost hydrocarbon zone (which may be behind unperforated casing): see attachment (Depth of Interval) feet.

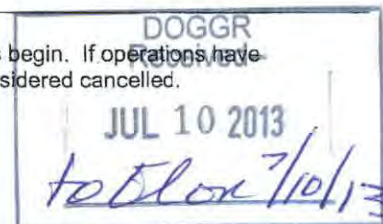
Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes ☒ No ☐

The proposed work is as follows: (A complete program is preferred and may be attached.)
See Attachment.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator C.R.G. Properties, Ltd			
Address 2109 GUNDRY AVE.		City/State SIGNAL HILL	Zip Code 90755
Name of Person Filing Notice MICK BEYER	Telephone Number: 562 989-6100	Signature <i>M. B.</i>	Date 07-10-13
Individual to contact for technical questions: MICK BEYER	Telephone Number: 310 505-9787	E-Mail Address: Mbeyer@allencoca.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.



CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

1967 Post-Window

13 7/8 4597#
cem 765'
350SX
17" hole

ETOC 84'

350SX x 1.18 =
413 cf
4" incsg .8812²²₁₅ 3524
409 cf annulus

765'

8 7/8" 36#
cem 3986
400 SX / 472 cf
ETOC: 2843'
12 1/4 BIT

ETOC 2865

472 cf - 9.3 = 463 cf

cem in csq 28 cf
= 9 cf

463 cf / .427 = 1121

drilled
thru 3139'

3986' WSO

15.5#

5 1/2" / 7 5/8" hole
cem 5964 - 3023
743 cf

post 4393 WSO

4393' CP

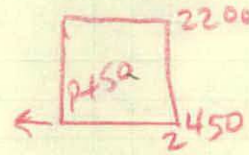
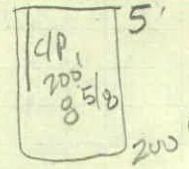
Perfs

5827'

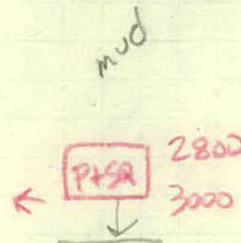
5964'

TD

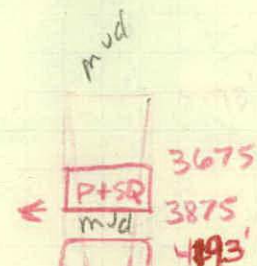
6540'



- BFW 2260'
- UHZ 2400'



- LW 3000'



- TA 3875'

- TB 4630'

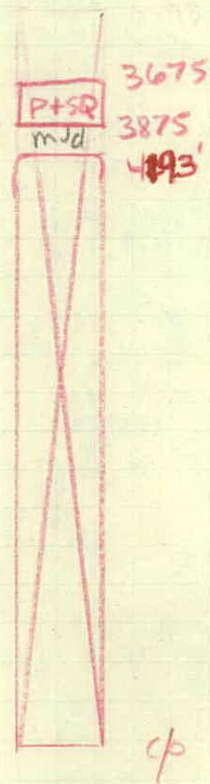


EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

C.R.G. Properties, Ltd. Well "Nwlbu" 8-3 (037-06496), Sec.13, Twn. 4S, Rge. 13W, S.B. B&M, Long Beach Oil Field.

According to Division records, the present condition of the well is as follows:

1. **Location:** West of Pacific Place just North of the 710 freeway on ramp. See map Exhibit A - Attachment II
2. **Accessibility:**
3. **Status:** Idle deserted
4. **Total Depth:** 6540' **Effective Depth:** 5964' **Elevation of Kelly Bushing (KB) above sea level:** 60'
5. **Casing:** 13-3/8" 45.97# casing cemented 765' with estimated top cement behind pipe at 84' +/-; 8-5/8" 36# casing cemented 3986' with estimated top of cement behind pipe at 2865' +/-, drilled thru 3139'; 5-1/2" 15.5# Id 3043' - 5964', cp 4393, estimated top of cement behind pipe at 3043, perforated from 4458' to 5827'.
6. **Tubing:** Unknown **Rods:** Unknown
7. **Base of Fresh Water (BFW):** 2260'
8. **Producing Zone(s):** Alamitos
9. **Hole Fluid:** Unknown
10. **Junk:** Unknown
11. **Plugs:** 6540' to 5964'.
12. **Comments:** Top of Brown zone 4680', top of Alamitos zone 3875', top of Wilbur zone 3000', and top of Upper Gas zone 2400'.

The following operations are necessary to plug and abandon the well:

1. A Notice of Intention to Abandon (form OG 108) is to be filed with this Division at least 10 days prior to commencing work. Work is not to begin until a Permit to Conduct Well Operations (Form OG 111) has been issued. All well operations are to be witnessed by a representative of this Division as directed in the Permit to Conduct Well Operations.
2. The abandonment contractor will review job safety programs (JSP) with all crewmembers prior to work startup and/or if conditions change. Monitor well for any leaking gas. Position gas monitors and ventilation fans, if warranted before moving in any other equipment or personnel.
3. Adequate blowout prevention equipment, as defined in Division's publication No. M07, shall be installed and maintained in operating condition at all times. The minimum requirements are:
 - a. A 3M rod Reagan or equivalent BOPE for pulling rods and pump operations.
 - b. A Class II 3M, with hydraulic controls, during abandonment operations.
 - c. A 3M lubricator for wire line operations.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs/cu ft and a minimum gel shear strength of 25 lbs. /100 sq. ft. All cement plugs are to have a minimum compressive strength of 1000 psi and maximum liquid permeability of 0.1 md. All depths noted are from the KB.
5. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

6. Kill well. Install and function test rod Reagan or equivalent BOPE. Pull out of the hole with rods and pump.
7. Remove rod Reagan. Install and function test Class II3M BOPE (function test BOPE each day thereafter).
8. Pull out all production tubing.
9. Use appropriate combination tools to clean out to 6540'.
10. Run in scraper. Scrape the 8 5/8" and the 5 1/2" casings.
11. Run in hole with tubing (if tag high, clean out fill to 6540').
12. The well shall be plugged with cement from 6540' to 4193'.
13. The well shall be plugged with cement from 3875' to 3675'.
14. The well shall be plugged with cement from 3043' to 2800'.
15. Prior to shooting any perforations for braidenhead squeezès, a pressure test of the casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
16. The 8-5/8" casing shall be perforated from 2440 to 2450'. Get an injection rate or a breakdown.
17. Sufficient cement shall be squeezed into the perforations to fill to 2190' outside the 8-5/8" casing.
18. The well shall be plugged with cement from 2450' to 2190'.
19. The 8-5/8" casing shall be perforated from 210 to 200'. Get an injection rate or a breakdown.
20. Sufficient cement shall be squeezed into the perforations to fill to surface.
21. The well shall be plugged with cement from 210' to surface.
22. The 13-3/8" X 17" annulus shall be plug with cement from 84' to surface.
23. All casing must be removed from between 5' and 10' below ground level.
24. A steel plate, at least as thick as the outer well casing and bearing the last five digits of the API number, shall be tack welded around the top of the outer casing.
25. Cellar, production pads and pipelines shall be removed and the resulting excavations filled with earth and compacted properly to prevent settling.
26. Remaining buried pipelines that cannot be removed shall be purged with clean water. Abandon line by pumping approved cement slurry mixture, weld steel cap on both ends of the line and bury.

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

27. All equipment, casing, or junk that requires removal to implement restoration to lawful conditions shall be removed and properly disposed of in accordance with environmental laws and in accordance with instructions from the Division of Oil and Gas. All liquid wastes shall be removed and properly disposed.
28. A well History (Form OG 103) shall be filed in duplicate with the Division within 60 days of completing the work and must include a description of the removal or abandonment of the well flow line and any associated piping.

1 DEPARTMENT OF CONSERVATION
2 Division of Oil, Gas, and Geothermal Resources
3 5816 Corporate Avenue, Suite 200
4 Cypress, California 90630
5 Telephone (714) 816-6847
6 Facsimile (714) 816-6853
7

8 **STATE OF CALIFORNIA**
9 **NATURAL RESOURCES AGENCY**
10 **DEPARTMENT OF CONSERVATION**
11 **DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**
12

13 **REVISED**

14 **FORMAL ORDER TO:**
15 **PLUG AND ABANDON WELLS &**
16 **RESTORE LEASE CONDITIONS**
17

18 **NO. 1032**

19 **Dated: October 18, 2012**

20 **Operator: C.R.G. Properties, Ltd. (C0250)**
21

22 **BY**

23 **Tim Kustic**

24 **STATE OIL AND GAS SUPERVISOR**
25
26
27

RESOURCES AGENCY OF CALIFORNIA/
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF PROPERTY AND WELL TRANSFER

Field or County Long Beach	District District 1 (Cypress, California)
Former owner Pacific Energy Res.	Date July 26, 2000

Well Name	API Number	Section Township Range
"Nwlbu" 5-2	037-00397	Sec. 13-4S-13W
"Nwlbu" 5-3	037-09796	Sec. 13-4S-13W
"Nwlbu" 5-4	037-09797	Sec. 13-4S-13W
"Nwlbu" 8-3	037-06496	Sec. 13-4S-13W
"Nwlbu" 8-4	037-06415	Sec. 13-4S-13W
"Nwlbu" 8-7	037-22512	Sec. 13-4S-13W
"Nwlbu" 9-2	037-13525	Sec. 13-4S-13W
"Nwlbu" 9-3	037-09791	Sec. 13-4S-13W
"Nwlbu" 9-4	037-00392	Sec. 13-4S-13W
"Nwlbu" 9-5	037-00142	Sec. 13-4S-13W
"Nwlbu" 9-6	037-00393	Sec. 13-4S-13W

Description of the land upon which the well (s) is (are) located.

See above

Date of transfer May 9, 2000	New owner C.R.G. Properties, Ltd. C0250	Type of organization Corp./Ltd.
	Address: 15332 Antioch Street, Suite 338 Pacific Palisades, CA 90272	Telephone (310) 808-9071
Reported by	OG34A received 6/2/2000 signed by both parties	
Confirmed by	Same as above	
New operator new status PA	Designation of Agent Mark Pender	
Old operator new status PA	Remarks See operator file for C.R.G. Properties, Ltd. for details	

OPERATOR STATUS ABBREVIATIONS PA - Producing Active NPA- No potential, Active PI- Potential Inactive NPI-No potential, Inactive Ab-Abandoned or No More Wells	Deputy Supervisor R. K. Baker	Signature Floyd M. Leeson Operations Engineer				
FORM AND RECORD CHECK LIST						
	Form or Record	Initials	Date	Form or Record	Initials	Date
	Form OGD121	N/A		Map and Book		
	Operator Card			Notice cancellations	N/A	
cc: Update; Envir Dsk; File Conservation Committee Harold W. Bertholf, Inc. LA County Assessor Sacramento EDP Cypress EDP	Well Records		7/27/2000	Bond Status BB/FML		7/26/2000
	Log Records		7/31/2000	EDP		7/27/2000
	Production Repts	N/A		Data Base		7/27/2000

WELL TRANSFER NOTICE

EFFEC MAY 9, 1994, PETRO RESOURCES, INC.

TRANS LONG BEACH NWLBU WELLS

TO PACIFIC ENERGY ~~CORP~~ *Resources*

SEE OGD156 DATED 5-13-94

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1																			
Former owner Sun Exploration & Production Co.		Date June 15, 1983																			
Name and location of well(s) Sec. 13-4S-13W S.B.B.&M. <table style="width:100%; border: none;"> <tr> <td style="width:33%;">NWLB 5-1 (037-09795)</td> <td style="width:33%;">NWLB 8-1 (037-09792)</td> <td style="width:33%;">NWLB 9-3 (037-09791)</td> </tr> <tr> <td>NWLB 5-2 (037-00397)</td> <td>NWLB 8-2 (037-09793)</td> <td>NWLB 9-4 (037-00392)</td> </tr> <tr> <td>NWLB 5-3 (037-09796)</td> <td>NWLB 8-3 (037-06496)</td> <td>NWLB 9-5 (037-00142)</td> </tr> <tr> <td>NWLB 5-4 (037-09797)</td> <td>NWLB 8-4 (037-06415)</td> <td>NWLB 9-6 (037-00393)</td> </tr> <tr> <td>NWLB 6-1 (037-09788)</td> <td>NWLB 8-7 (037-22512)</td> <td></td> </tr> <tr> <td>NWLB 6-2 (037-09789)</td> <td>NWLB 9-2 (037-13525)</td> <td></td> </tr> </table>				NWLB 5-1 (037-09795)	NWLB 8-1 (037-09792)	NWLB 9-3 (037-09791)	NWLB 5-2 (037-00397)	NWLB 8-2 (037-09793)	NWLB 9-4 (037-00392)	NWLB 5-3 (037-09796)	NWLB 8-3 (037-06496)	NWLB 9-5 (037-00142)	NWLB 5-4 (037-09797)	NWLB 8-4 (037-06415)	NWLB 9-6 (037-00393)	NWLB 6-1 (037-09788)	NWLB 8-7 (037-22512)		NWLB 6-2 (037-09789)	NWLB 9-2 (037-13525)	
NWLB 5-1 (037-09795)	NWLB 8-1 (037-09792)	NWLB 9-3 (037-09791)																			
NWLB 5-2 (037-00397)	NWLB 8-2 (037-09793)	NWLB 9-4 (037-00392)																			
NWLB 5-3 (037-09796)	NWLB 8-3 (037-06496)	NWLB 9-5 (037-00142)																			
NWLB 5-4 (037-09797)	NWLB 8-4 (037-06415)	NWLB 9-6 (037-00393)																			
NWLB 6-1 (037-09788)	NWLB 8-7 (037-22512)																				
NWLB 6-2 (037-09789)	NWLB 9-2 (037-13525)																				
Description of the land upon which the well(s) is (are) located																					
Date of transfer, sale, assignment, conveyance, or exchange May 1, 1983	New owner Petro Resources, Inc. Address 4200 Easton Drive, Suite 16 Bakersfield, CA 94309	Type of organization Corp. Telephone No. 805/323-4118																			
Reported by Letter from Sun Exploration & Production Co. dated 5-16-83.																					
Confirmed by Letter from Petro Resources, Inc., dated 5-18-83.																					
New operator new status (status abbreviation) PA	Request designation of agent Joe D. Rose, same address.																				
Old operator new status (status abbreviation) PA	Remarks																				

Deputy Supervisor V. F. Gaede	Signature
---	---------------

OPERATOR STATUS ABBREVIATIONS		FORM AND RECORD CHECK LIST					
PA - Producing Active							
NPA - No Potential, Active	Form or record	Initials	Date	Form or record	Initials	Date	
PI - Potential Inactive	Form OGD121	CP	7-7-83	Map and book	137	7/12/83	
NPI - No Potential, Inactive	Form OGD140	NONE		Notice to be cancelled			
Ab - Abandoned or No More Wells	New well cards	CP	7-7-83	Bond status			
	Well records	CP	7-7-83	EDP files			
	Electric logs	CP	7-7-83	Update			
	Production reports			Conservation Committee			
				L. A. Assessors			

Name change from Sun Oil Co. to SUN EXPLORATION & PRODUCTION CO.

1-1-82, Form 156 dated 1-21-82. See ownership file.

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Long Beach, California

Oct. 4, 1979

Mr. L. B. Carroll, Jr., Agent
Sun Oil Co.
23928 Lyons Ave.
Newhall, CA 91321

DEAR SIR:

Your request dated March 19, 1979, relative to change in designation of well(s) in Sec. 13, T. 4S, R. 13W, S.B.B. & M., Long Beach field, Los Angeles County, District No. 1, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

“* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor.”

the proposed change in designation is hereby authorized as follows:

Old Designation	API	New Designation
"Oil Operators" 1	037-09792 (See)	NWLBU 8-1
" " 2	037-09793	NWLBU 8-2
" " 3	037-06496	NWLBU 8-3
" " 4	037-06415	NWLBU 8-4
"Pool" 1	037-09795	NWLBU 5-1
" " 2	037-00397	NWLBU 5-2
" " 3	037-09796	NWLBU 5-3
" " 4	037-09797	NWLBU 5-4
"Amebco" 1	037-09788	NWLBU 6-1
" " 2	037-09789	NWLBU 6-2
"Flood Control" 2	037-13525	NWLBU 9-2
" " 3	037-09791	NWLBU 9-3
" " 4	037-00392	NWLBU 9-4
" " 5	037-00142	NWLBU 9-5
" " 6	037-00393	NWLBU 9-6

*map 137
+ Book
pme 11/2/79*

RWS:sc

M. G. Mefferd
JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

cc: Update Center
EDP
Conservation Committee

By Richard W. Stahl
Acting Deputy Supervisor
R. A. Ybarra

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1
Former owner General Exploration Co.		Date February 15, 1979
Name and location of well(s)		
<u>Sec. 11-4S-13W</u>		<u>Sec. 13-4S-13W</u>
"Dominguez" 2-10 (037-11859)		"Flood Control" 6 (037-00393)
<u>Sec. 13-4S-13W</u>		"Oil Operators" 1 (037-09792)
"Amebco" 1 (037-09788)		"Oil Operators" 2 (037-09793)
"Amebco" 2 (037-09789)		"Oil Operators" 3 (037-06496)
"Flood Control" 2 (037-13525)		"Oil Operators" 4 (037-06415)
"Flood Control" 3 (037-09791)		"Pool" 1 (037-09795)
"Flood Control" 4 (037-00392)		"Pool" 2 (037-00397)
"Flood Control" 5 (037-00142)		"Pool" 3 (037-09796)
Description of the land upon which the well(s) is (are) located		<u>Sec. 14-4S-13W</u>
		"Dominguez" 1 (037-11858)
Date of transfer, sale, assignment, conveyance, or exchange Dec. 1, 1978	New owner Sun Oil Company	Type of organization Corporation
	Address 23928 Lyons Avenue Newhall, CA 91321	Telephone No.
Reported by Former operator		
Confirmed by New operator		
New operator new status (status abbreviation) PA	Request designation of agent	
Old operator new status (status abbreviation) AB	Remarks	

OPERATOR STATUS ABBREVIATIONS	Deputy Supervisor <i>for</i> M. B. Albright	Signature <i>Eleanor R. Kie</i>

PA - Producing Active	FORM AND RECORD CHECK LIST					
NPA - No Potential, Active	Form or record	Initials	Date	Form or record	Initials	Date
PI - Potential Inactive	Form OGD121			Map and book	TR	2-16-79
NPI - No Potential, Inactive	Form OGD148			Notice to be considered		
Ab - Abandoned or No More Wells	New well logs			Bond status		
	Well records			EDP files		
	Electric logs			ara		
	Production reports			cc: EDP Update		
				Conservation Committee		
				Update Center		

DIVISION OF OIL AND GAS

CHECK T - RECORDS RECEIVED AND WELL STATUS

Company GENERAL EXPLORATION Co Well No. "OIL OPERATORS" 3
API No. 037-06496 Sec. 13, T. 4S, R. 13W, SB B.&M.
County LA Field LONG BEACH

RECORDS RECEIVED

DATE

Well Summary (Form OGI00) _____
✓ History (Form OGI03) 5-27-77 _____
Core Record (Form OGI01) _____
Directional Survey _____
Sidewall Samples _____
Other _____
Date final records received _____
Electric logs: _____

STATUS

STATUS

Producing - Oil X Water Disposal _____
Idle - Oil _____ Water Flood _____
Abandoned - Oil _____ Steam Flood _____
Drilling - Idle _____ Fire Flood _____
Abandoned - Dry Hole _____ Air Injection _____
Producing - Gas _____ Gas Injection _____
Idle - Gas _____ CO₂ Injection _____
Abandoned - Gas _____ LPG Injection _____
Gas-Open to Oil Zone _____ Observation _____
Water Flood Source _____
DATE 4-24-77 _____
RECOMPLETED _____
REMARKS _____

ENGINEER'S CHECK LIST

1. Summary, History, & Core record (dupl.) ✓
2. Electric Log _____
3. Operator's Name _____
4. Signature _____
5. Well Designation _____
6. Location _____
7. Elevation _____
8. Notices _____
9. "T" Reports _____
10. Casing Record _____
11. Plugs _____
12. Surface Inspection _____
13. Production _____
14. E Well on Prod. Dir. Sur. _____

CLERICAL CHECK LIST

1. Location change (F-OGD165) _____
2. Elevation change (F-OGD165) _____
3. Form OGD121 _____
4. Form OGI59 (Final Letter) _____
5. Form OGD150b (Release of Bond) _____
6. Duplicate logs to archives _____
7. Notice of Records due (F-OGD170) _____

sent to SB Blueprint 6-3-77

RECORDS NOT APPROVED

Reason: _____

RECORDS APPROVED BB

RELEASE BOND PC

Date Eligible 5-27-77
(Use date last needed records were received.)

MAP AND MAP BOOK NC

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR GENERAL EXPLORATION CO. FIELD NORTH LONG BEACH
~~037-06496~~ (037-06496)
 Well No. OIL OPERATORS 3, Sec. 13, T. 4S, R. 13W, SB B. & M.
 Date 5-25, 19 77 Signed Robert Grams
4021 N. PACIFIC LONG BEACH Title 213-636-1629
 (Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

4-16-77 Rigged up well servicing unit. Pulled rods & tubing. Ran bailer and tagged fill at 5870'. Installed BOP.

4-17-77 Ran Baker scraper and brushes in hole. Tested tubing to 5000psi. Rigged up Dresser Atlas. Ran correlation log and perforated 2 hpf as follows: 4740'-4765'; 4775' - 4707'; 4792' - 4810'.

4-18-77 Ran scraper through new perfs. Ran wash teel with retrievomatic packer to top of liner.

4-19-77 Washed perfs with acid mixture
 A. 10 gal/ft 15% BJ One shot (15% solvent)
 B. 15 gal/ft 12-3 4CL-HF One shot (10% Solvent)
 C. 10 gal/ft #1 Diesel Fuel containing 10% EGMBE Mutual Solvent

4-20-77 Continued washing perfs. Surged perfs with wash teel, pulled out, ran in hole with suction washer.

4-21-77 Suction washed perfs. Ran bailer, tagged fill at 5849'.

4-22-77 Ran tubing and rods. Put well on production.

4-23-77 Well did not pump up.

4-24-77 Pulled rods and pump. Barrel unscrewed, ran new pump. Put well back on production.

32.2 BOPD 25.7 BWPD 45.1% CUT

RECEIVED
 MAY 25 1977
 DIVISION OF OIL AND GAS
 RESOURCES AGENCY OF CALIFORNIA

DIV. OF OIL AND GAS
LONG BEACH, CA.

00000-102 4-31 30.00 0.00

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR GENERAL EXPLORATION CO. FIELD NORTH LONG BEACHWell No. OIL OPERATORS #3, Sec. 13, T. 4S, R. 13W, SB B. & M.Date 5-25, 19 77 Signed Robert Graves4021 N. PACIFIC 213-636-1629 Title Production Superintendent
(Address) LONG BEACH (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

OIL OPERATORS 3 CONTINUED

Well condition at completion of work:

TD 1st hole; 5450': TD 2nd hole 5833' (redrilled from 3142' through 8 5/8" casing window 3139' - 3174'); TD 3rd hole, 6540' (redrilled from cem plug 5094')

Casing Detail:

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap wse), CP 4393'

Perfs 4394-95 wsd

4407'-4444'; 4458' - 4498'; 4563' - 4616';

4740'-4765'; 4775' - 4787'; 4792' - 4810';

5397'-5430'; 5692' - 5707'; 5711' - 5728';

5733'-5752'; 5794' - 5808'; 5812' - 5827'

RECEIVED
DIVISION OF OIL AND GAS

MAY 31 1977

RECEIVED

MAY 27 12 45 PM '77

DIV. OF OIL AND GAS
LONG BEACH, CA.

FOIA b 7 - D

МЕТ-ИО ОІГ ОБЕРАТОНБ НЗ 250 ІЗ І АС Н ІЗМ СБ Р.8.9

OSBURNION GRIFFINT EXHIBITION CO. LTD NORTH LONG BEACH

HISTOIRY OF OH OF C22 M611

DIVISION OF OIL AND GAS

SIEGAL, M. DOBRYCHIE

0103-108 2-25 2015 101 0-25

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 176-432

Mr. R. L. Graves, Agent
GENERAL EXPLORATION CO.
4021 N. Pacific Place
Long Beach, CA 90806

Long Beach, Calif.
June 17, 1976

DEAR SIR:

Your proposal to rework Well No. (037-06496)
Section 13, T. 4S, R. 13W, S.B. B. & M., Long Beach Field, "Oil Operators" 3
dated 4/15/76, received 6/15/76, has been examined in conjunction with records filed in this office. Los Angeles County,

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment with a minimum 2000 psi working pressure shall be installed and maintained in operating condition during all stages of perforating.
2. Well records, under Sec. 3215 of the Public Resources Code, are received 60 days after recompletion of the well.

RFC:dr

Blanket Bond

5/25/77
Graves/Crowder
Work done history
will be filed

HAROLD W. BERTHOLF,
~~X~~JOHN E. MATTHEWS, Jr., State Oil and Gas Supervisor

By M.B. Albright, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Long Beach, California May 4, 1976

Mr. Robert L. Graves, Agent
General Exploration Co.
4021 N. Pacific Place
Long Beach, CA 90806

Gentlemen:

Dear Sir:

I have received your ~~notices dated~~ notices dated April 15, 1976, of

notice of intention to rework Well Nos "Pool" 2 & "Oil Operators" 3

Sec. 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach field.

Your notices to rework cannot be considered until a surety bond in the sum of \$5,000.00 has been filed for each well. Operations should not be started until the approval of this Division has been received. This will ensure that you have notice of our requirements.

The notices are being returned to you for signatures. Please return these signed notices with the bond.

HAROLD W. BERTHOLF

~~JOHN C. MATHIAS~~
State Oil and Gas Supervisor

ag
Enc.

(2nd request 6-3-76)

OG113 (12-73-GSR1-1M)

By *M. B. Auvriat*
Deputy Supervisor

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Long Beach Calif. April 15 1976

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of deepening, redrilling, plugging or altering casing at Well No. "Oil Operators" 3
(Cross out unnecessary words)Lease, Sec. 13, T. 4S, R. 13 W, SB B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. - 6540' PBTD - 5964'

2. Complete casing record, including plugs:

13 3/8" c 765'8 5/8" c 3139' (Milled for Window)5 1/2" , 15.5# , J-55 c 3043' to 5964'Perfs 4394-95 (WSO); 4407-4444'; 4458-4498'; 4562-4616';
5397'-5430'; 5692'-5707'; 5711'-5728'; 5733'-5752';
5794'-5808'; 5812-5827'3. Last produced. 4/15/76 9.2 14.9 —
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)

The proposed work is as follows:

1. Pull Pump, Rods, & Tubing
2. Perforate following intervals
4740'-4765'
4775'-4787'
4792'-4810'

3. Return well to production

Rework

MAP BOOK		CARDS	BOND	FOR	
				114	121
			B	✓	✓

4021 PACIFIC PLACE
(Address) Long Beach
213-424-8025
(Telephone No.)

General Exploration Co
(Name of Operator)

By

Robert James

RECEIVED
JUN 15 12 10 PM '76
DIV. OF OIL AND GAS
LONG BEACH, CA.

RECEIVED
MAY 4 11 21 AM '76
DIV. OF OIL AND GAS
LONG BEACH, CA.

Notice of intention to Dechen' Regain' Ring or After Owing in 2 on

DIVISION OF OIL AND GAS

WORK PERFORMED:

Drill _____ Redrill _____ Deepen _____
 Plug _____ Alter casing ☒
 Water flood _____ Water disposal _____
 Abandon _____
 Other _____

STATUS:

(Date)

Producing _____
 Recomp. prod. ☒ 6-13-68
 Water flood _____
 Water disposal _____
 Abandoned _____
 Other _____
 MAP AND BOOK NC

RECORDS FILED & DATE:

Clerk LawRECORDS & REQUIREMENTS CHECKED: Eng. Wen

Summary (dup.) _____

Log & Core (dup.) _____

History (dup.) 7/3/68 ☒

E-log _____

Radio log _____

D. Survey _____

Other _____

(Check records for signature
and correct name of operator
or well, S.T.R. and field.)

Location _____ Notice states _____

Elevation _____ Notice states _____

Production Reports _____

(If production reports not
received, make notation and
inform Sr. Steno. when rec'd.)

If stimulation or disposal well:

Form 121 _____ Folder _____

Form 19-A

Surface inspection _____

Data needed now

Clerk:

Request records _____

F 170 _____

Correct records _____

F 165 _____

(Specify)

165A _____

CARDS NCBOND: No bond required

Hold _____ Reason _____

Release _____ Date elig. _____

F 150b _____

End premium year _____

Release requested _____ (Check)

Bond superseded _____ (one)

Well abandoned _____

FINAL LETTER _____

F 159 _____

and

FILE CLEARED _____

F 121 _____

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Co. of Calif. FIELD Long BeachWell No. "Oil Operators" 3, Sec. 13, T. 4S, R. 13W, SB B. & M.Date July 2, 1968

Signed

R. S. Ballantyne, Jr.

417 S. Hill Street

Los Angeles, 90013

628-2156

Title Vice President

(Address)

(Telephone Number)

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date
1968

4/30

Pumped 34 bbl. net 24.3° oil and 2 bbl. water with 60 Mcf gas.

5/1

Blew down gas off well. Moved in production unit and pulled rods and tubing.

5/2

Ran bailer and found fill at 4875'. Bailed sticky mud to 5890'. Installed B.O.P.E. With bailer found fluid level at 3030' and bottom at 5890'. Pumped 100 bbl. salt water into casing - equivalent to 1700' inside the 8-5/8" casing. McCullough jet perforated (omega jets) three holes per foot 5827-5812' and 5808-5794' sticking the second gun. While working gun loose, fluid surfaced and pressure built up to 900# on lubricator before recovering gun. Closed off preventor, removed lubricator and tubing stripper, and installed blank flange on top of preventor. Installed needle bean in flow line from 2" outlet in casing head. Flowed 27 net bbl. oil in 19 hrs. on 14/64" bean, 640 Mcfd. 860#.

5/3

840 Mcf, 770#, 15/64", Laid down tubing and rods. Moved out pulling unit.

5/4-6/9

Well flowed gas with occasional slugs of oil which increased in volume as the pressure declined. The well was practically dead 6/9 and salt water was pumped into the well. During the interval from 5/2 to 6/9 the well produced 235 net bbl. of 25.0° oil and 17,000 Mcf. gas. There was no appreciable cut. Pumped salt water into well at intervals. Well dead.

6/10-11

Moved in production unit. Rigged up bailing gate above B.O.P.E. Continued pumping water into casing as required to keep hole nearly full throughout this operation. Ran bailer and located fill at 5885'. Rigged up lubricator and McCullough reperforated two holes per foot: 5752-5733', 5728-5712' and 5707-5692', and perforated three holes per foot: 5430-5397'. Omega jets in 4" steel carrier were used throughout. Ran pump on 2-7/8" tubing to 4312' with gas anchor extending to 4348'. Ran rods. Moved out unit.

6/13

Well pumped water and 50 bbl. oil in 16 hrs with casing pressure building to 90#.

6/17

Pumped 29 bbl. oil and 26 bbl. water, 20#/300-540#.

6/22

Pumped 11 bbl. oil and 8 bbl. water, 20#/120-130#, 315 Mcf.

6/27

Pumped 22 bbl. oil and 6 bbl. water, 20#/110-120#, 296 Mcf.

DIVISION OF OIL AND
RECEIVED

JUL 3 1968

WELL CONDITION AT COMPLETION OF WORK:

TD 1st hole 5450', TD 2nd hole 5833' (redrilled from 3142' through 8-5/8" casing window 3139-3174'), TD 3rd hole 6540' (redrilled from cem. plug 5094').

CASING CONDITION:

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap WSO), CP 4393'. Perfs. 4393-4394' (WSO), 4407-4444', 4458-4498', 4562-4616', 5397-5430', 5692-5707', 5711-5728',

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Co. of Cal. FIELD Long Beach

Well No. "Oil Operators" 3, Sec. 13, T. 4S, R. 13W, SB B. & M.

Date July 2, 1968 Signed R. S. Ballantyne, Jr.

417 S. Hill Street 628-2156 Title Vice President

Los Angeles, 90013

(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

5733-5752', 5794-5808' and 5812-5827'. Plug 5964-5922' w/cem. and 5922-5890' w/sand.

Sidetracked:

8-5/8" C 3986', top 3174'. Plug 3174' (and open hole up to 3142')
 5-1/2" C 5446', top 3928' (lap WSO). Bad 4195 and 5107', plgd.
 Perf. & plgd. 4080-4158', 4190-4205', 4852-4950', 5140-5180',
 5190-5200' and 5306-5355'. Plug 3928'.

DIVISION OF OIL AND
RECEIVED

JUL 3 1968

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 168-562

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION COMPANY OF CALIFORNIA

Inglewood, Calif.
April 30, 1968

DEAR SIR:

(037-06496)

Your proposal to alter casing Well No. "Oil Operators" 3
Section 13, T. 4 S, R. 13 W, S.B.B. & M., Long Beach Field, Los Angeles County,
dated Apr. 25, 1968, received Apr. 26, 1968, has been examined in conjunction with records filed in this office.

~~Present conditions as shown by the records and the proposal are as follows:~~

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.
5-1/2" cp 4393'. TD 1st hole 5450', TD 2nd hole 5833'.

With reference to your proposal our decision is as follows:

DECISION

THE PROPOSAL IS APPROVED.

WLI:nw

cc Company

No Bond Required

F. E. KASLINE

E. R. MURRAY-AARON, State Oil and Gas Supervisor

By

Deputy

DIVISION OF OIL AND GAS

APR 26 1968

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

INGLEWOOD, CALIFORNIA

Los Angeles, Calif.

April 25, 1968

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. "Oil Operators" 3
(Cross out unnecessary words)

_____, Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 6540'.

2. Complete casing record, including plugs:

(Depths from present KB of 60')

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap WSO). Perfs. 4393-4394' (WSO), 4407-4444', 4458-4498', 4562-4616', 5692-5707', 5711-5728' and 5733-5752'.

Sidetracked:

8-5/8" C 3986', top 3174'. Plug 3174' (and open hole up to 3142')

5-1/2" C 5446', top 3928' (lap WSO). Bad 4195 and 5107', plgd.

Perf. & plgd. 4080-4158', 4190-4205', 4852-4950', 5140-5180', 5190-5200' and 5306-5355'. Plug 3928'.

3. Last produced. 4/25/68 34 2 60
(Date) (Oil, B/D) (Water, B/D) (Gas Mcf/D)

The proposed work is as follows:

1. Take well off production.
2. Starting May 1, 1968, pull rods and tubing.
3. Rig up B.O.P.E. and lubricator and pump 100 bbl. of salt water into casing.
4. Perforate 5397-5430', 5794-5808' and 5812-5827'. Reperforate 5692-5707', 5712-5728' and 5733-5752'.
5. Return well to production.

Alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			<i>X</i>	ARG	ARG

NO

417 S. Hill St., Los Angeles 90013

(Address)

628-2156

(Telephone No.)

GENERAL EXPLORATION COMPANY OF CALIFORNIA

(Name of Operator)

By *R. S. Ballantyne, Jr.*
R. S. Ballantyne, Jr., Vice President

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

WORK PERFORMED:

Drill _____ Redrill ☒ Deepen _____
 Plug _____ Alter casing _____
 Water flood _____ Water disposal _____
 Abandon _____
 Other _____

STATUS:

(Date)

Producing _____
 Recomp. prod. ☒ 7-28-67
 Water flood _____
 Water disposal _____
 Abandoned _____
 Other _____
 MAP AND BOOK NC

RECORDS FILED & DATE: Clerk M.T.RECORDS & REQUIREMENTS CHECKED: Eng. WJH

Summary (dup.) _____

✓ Log & Core (dup.) 8/3/67 ✓✓ History (dup.) 8/3/67 ✓✓ E-log (2 copies) 3138'-6536' 8/3/67 ✓

Radio log _____

D. Survey _____

Other _____

(Check records for signature
 and correct name of operator
 or well, S.T.R. and field.)

Location _____ Notice states _____

Elevation _____ Notice states _____

Production Reports _____

(If production reports not
 received, make notation and
 inform Sr. Steno. when rec'd.)

If stimulation or disposal well:
 Form 121 _____ Folder _____

Form 19-A

Surface inspection _____

Data needed none Clerk:

Request records _____ F 170

Correct records _____ F 165
 (Specify) 165A

CARDS NCBOND: NO. 141161 dated 6-27-67

Hold _____ Reason _____

Release ☒ Date elig. 10-17-67 F 150b AB

End premium year ☒
 Release requested _____ (Check)
 Bond superseded _____ (one)
 Well abandoned _____

FINAL LETTER _____ F 159

and
 FILE CLEARED _____ F 121

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of CaliforniaWell No. "Oil Operators" 3, Sec. 13, T. 4 S., R. 13 W., S.B.B. & M.Date July 31,, 19 67

Signed

R. S. Ballantyne, Jr.
R. S. Ballantyne, Jr.417 South Hill St., Los Angeles 90013 628-2156 Title Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1967 Note: Depth measurements taken from present K.B. elevation of 60' which is 6' higher than original datum. Ground elevation is 48'.

6/30 Moved in, rigged up drilling equipment, pulled and laid down tubing, installed B.O.P.E. (Graham Drilling Company).

7/1-2 Ran 7-5/8" bit and made up 3-1/2" drill pipe. Found top of 5-1/2" liner at 3932'. Ran Servco section mill, located casing collars at 3190', 3145' and 3101', milled section in 8-5/8" casing from 3139' to 3174'. Opened window to 12-3/4". Ran 284' of 2-3/8" tubing stinger on drill pipe. Cleaned out sand inside 5-1/2" liner to 4165'. Laid 30-sack class G cement plug with 2% CaCl₂ from 4147'. (Estimated top of plug at 3908'.) Laid 70-sack class G plus 20% sand with 0.5% CFR-2 from 3233' with rotating tubing scratchers opposite window. Pulled to 2850' and circulated pipe clean. Held 1200# for 5 minutes - no pressure drop. Found top of cement at 3077' and cleaned out to 3142'.

7/3-13 Drilled 7-5/8" hole to 5833'. 5" Dynadrills were used as follows: 3142-3240', 4257-4378' and 4487-4575'. The interval 4468-4487' was cored.

7/13 Ran Schlumberger I.E.S. 5833-3139' and C.D.M. 5833-3700'. Laid 182 CF (160 sacks class G, 30 sacks sand, 5 sacks salt, 0.5% CFR-2) plug through 461' stinger of tubing on drill pipe from 5460'.

7/14 Ran 7-5/8" bit and hit bridge at 4135', cleaned out to 4174' and lost circulation. Pulled up inside 8-5/8" casing to 3123' and regained circulation. Ran to top of cement at 4997' and cleaned out to 5012' without circulation. Pulled up again to 3123' and introduced rubber and fibrous lost circulation material into mud system. Regained circulation and ran to 5012' circulating in stages. Drilled out cement to 5094' with full returns.

7/15-18 Drilled 7-5/8" hole to 6008'. A 5" Dynadrill was used from 5094' to 5147'. Ran Schlumberger I.E.S. 6008-4850'.

7/18-20 Drilled 7-5/8" hole to 6540' (T.D.). Ran Schlumberger I.E.S. 6540-6008'.

7/20 Ran to T.D. and conditioned mud. Ran 76 joints of 5-1/2", 15.5#, J-55 liner with Burns liner hanger (2921', including hanger) on 3-1/2" drill pipe. With liner hanging at 5964', (top at 3043') cemented with 743 C.F. 1:1 class G cement pozmix slurry with 2% gel and 0.5% CFR-2 and 10% salt in mix water. 500 gal. mud flush and 20 C.F. water preceded the slurry. Displaced with 530 CF mud (509 CF estimated) and plug was not observed to hit baffle. Pulled stinger up to 2980' and backscuttled 180 CF (127 CF in drill pipe) without cement returns.

DIVISION OF OIL AND GAS
RECEIVED

AUG 8 1967

INGLEWOOD, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Page 2

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of California

Well No. "Oil Operators" 3, Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.

Date July 31,, 19 67 Signed R. S. Ballantyne, Jr.

417 South Hill St., Los Angeles 90013 628-2156 Title Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

- 7/21 Ran 7-5/8" bit and 8-5/8" casing scraper. Encountered 10' soft cement bridge at 1000' and drilled out same. Pushed plug to top of hard cement at 2832'. Drilled out cement to top of liner at 3043'. Conditioned mud and held 1380# on casing for 5 minutes. Ran 4-3/4" bit and 5-1/2" casing scraper. Drilled out cement inside liner from 3043' to 3083'. Ran to 5922', top of float collar, pushing something (probably rubber liner wiper plug) ahead the last 1000'. Conditioned mud and held 1530# on casing for 5 minutes.
- 7/22 Ran Cook tester on drill pipe and set packer at 3009' with tail to 3022'. Open 1 hour. 2 minute initial light blow and dead thereafter. Recovered net rise of 45' drilling fluid. Lap test approved by D.O.G. Ran McCullough gamma-bond cement log 5910-3900' and perforated four 1/2" jet holes 4394-4393'. Ran Cook tester on 1411' of 2-7/8" tubing below drill pipe. Set packer at 4366' with tail piece to 4377'. Open 1 hour. Medium, slightly diminishing blow throughout test. Recovered 1470' slightly muddy water down to salty (476 g/g) water.
- 7/23 Ran Baker shoe squeeze tool on tubing and set packer at 4094' with tail to 4187'. Broke down formation with 3500# and squeezed 33 sacks of 50 sacks class G cement mixed at a final pressure of 3000# through perforations. Found top of cement at 4243' and drilled out cement running out of it at 4425'. Perforated four 1/2" jet holes 4394-4395' with McCullough steel carrier. Ran Cook tester on tubing/drill pipe and set packer at 4366' with tail to 4377'. Open 1 hour-initial 2 minute weak blow and dead thereafter. Recovered a rise of 40' drilling fluid. W.S.O. approved by D.O.G.
- 7/24 Ran 4-3/4" bit to 5922' and changed mud over to 67# salt water. Laid down 3-1/2" drill pipe. Ran McCullough 4" jet carrier and perforated four 1/2" jet holes per foot as follows: 5752-5733', 5728-5711' and 5707-5692.
- 7/25 Ran Guiberson packer on combination string of 2-7/8" tubing and set with bottom of packer at 4337'. Removed B.O.P.E. and rigged up surface equipment. Swabbed well and when pulling from 2200' the sand line pulled out of socket and swab dropped. Opened valve in packer and equalized fluid. Ran overshot but could not recover swab. Installed B.O.P.E., pulled and broached tubing. Recovered swab on bottom.
- 7/26 Re-ran Guiberson packer as above. Swabbed well working down to 4000'. After swabbing 67 bbl. of water with trace of oil and with well gassing, placed on a 22/64" bean at 9:00 p.m.
- 7/27 Rigged up lubricator and McCullough perforated four holes per foot with 2-1/8" JRL Ceram-jets as follows: 4616-4562', 4498-4458' and 4444-4407'. Completed perforating at 10:00 p.m.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS Page 3

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of CaliforniaWell No. "Oil Operators" 3, Sec. 13, T. 4 S, R. 13 W, S.B.B. & M.Date July 31, 19 67

Signed

R. S. Ballantyne, Jr.417 South Hill St., Los Angeles 90013

(Address)

(Telephone Number)

Title Vice President

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

7/28
7/30

Moved out drilling equipment. Flowed 94 bbl. 25.3° oil, 4.0%, 140#/pkr., 570 Mcf.
103 bbl. 25.2°, 6.5%, 120#/pkr., 555 Mcf.

Casing Record at Completion of Work:

(Depths from present KB of 60') T.D. 6540

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap WSO). Perfs. 4393-4394' (WSO), 4407-4444',
4458-4498', 4562-4616', 5692-5707', 5711-5728' and 5733-5752'.Sidetracked:

8-5/8" C 3986', top 3174'. Plug 3174' (and open hole up to 3142')

5-1/2" C 5446', top 3928' (lap WSO). Bad 4195 and 5107', plgd.

Perf. & plgd. 4080-4158', 4190-4205', 4852-4950', 5140-5180', 5190-5200'
and 5306-5355'. Plug 3928'.Orig
abandoned
well

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator General Exploration Company of Calif. Field Long Beach

Well No. "Oil Operators" #3 Redrill Sec. 13, T. 45, R. 130W, S. 8. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4468'	4487'	21'		12.5 <u>12.5</u>	<u>CORE #1</u> Oil sand, unbroken, firm to soft, mostly fine to medium fine poorly sorted. Locally finely pebbly, light brown with grayish cast on broken surfaces light gold to medium buff fluorescence, pepper and salt on broken surfaces (mud penetration?). In top 0.2' two 1/16" ribbons gray sand at 50-55° under gray spot with pebbles. No fluorescence. Probably related to turbidity bedding. At 4.0', one 1/64" ribbon of non-fluorescent clay at about 40°, could be bedding parting. Dip not reliable. (No samples taken)

DIVISION OF OIL AND GAS
RECEIVED
AUG 3 1967
INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND
RECEIVED

AUG 3 1967

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T 167-670

Mr. C. G. Willis
417 S. Hill Street
Los Angeles, California 90013
 Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
July 27, 1967

DEAR SIR: (037-06496)

Your well No. "Oil Operators" 3, Sec. 13, T. 4 S, R. 13 W, S.B.B & M.
Long Beach Field, in Los Angeles County, was tested for water shut-off
 on July 23, 1967 Mr. S. Cordova, Engineer, designated by the supervisor was present
 from 8:30 p.m. to 9:30 p.m. as prescribed by law; there were also present J. Dedmon, Drilling
Foreman & R. Morgan, Driller

Shut-off data: 5-1/2 in. 15.5 lb. casing was re cemented through perforations at 4393 ft.
 on July 23, 1967 in 7-5/8 in. hole with 50 ~~more~~ sacks of cement
of which 33 sacks was squeezed away under a final pressure of 3000 Psi
calculated to fill behind casing to ----- ft. below surface.

Casing record of well: 13-3/8" cem. 765'; 8-5/8" cem. 3986', window 3139'-3174', sidetracked
@ 3142'; 5-1/2" cem. 3043'-5964', cp 4393', perf. 4393' WSO. TD 1st ~~hole~~ hole 5450'.
 TD 2nd hole 5833'.

Present depth 6540 ft. cmt. bridge 5964 ft. to 5922 ft. Cleaned out cmt. 4243 ft. to 4425 ft. for test.
 A Cook tester was run into the hole on 2-7/8 in. ~~tail pipe~~ tubing,
 with ---- ft. of water-mud cushion, and packer -- set at 4366 ft. with tailpiece to 4377 ft.
 Tester valve, with 5/8 in. bean, was open for 1 hr. and ----- min. During this interval there was a
weak blow for 2 minutes & no blow thereafter.

Mr. ----- reported:

MR. S. CORDOVA, ENGINEER, WAS PRESENT AT THE WELL FROM 5:00 P.M. TO 6:00 P.M. ON
 JULY 22, 1967 AND MR. L. STANDER REPORTED THAT the 5-1/2" casing was jet-perforated
 with four, 1/2" holes at 4393' for the water shut-off test.
 THE ENGINEER NOTED THAT when the tubing was removed, 1470' of watery drilling fluid
 and salt water was found above the tester.

MR. S. CORDOVA, ENGINEER, WAS PRESENT AT THE WELL FROM 8:30 P.M. TO 9:30 P.M. ON
 JULY 23, 1967 AND MR. DEDMON REPORTED:

1. The 5-1/2" casing was recemented as noted above.
2. The 5-1/2" casing was jet-perforated with four, 1/2" holes at 4393'.

THE ENGINEER NOTED:

1. When the tubing was removed, 40' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

THE 5-1/2" SHUT-OFF AT 4393' IS APPROVED.

SC:nw

cc Company

E. R. MURRAY-AARON

State Oil and Gas Supervisor

By E. R. Murray-Aaron

Deputy

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 167-669

Mr. C. G. Willis
417 S. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
July 27, 1967

DEAR SIR: (037-06496)

Operations at well No. "Oil Operators" 3, Sec. 13, T. 4 S, R. 13 W, S.E. B & M.
Long Beach Field, in Los Angeles County, were witnessed
on July 22, 1967. Mr. S. Cordova, Engineer, representative of the supervisor was present
from 7:30 a.m. to 8:20 a.m. There were also present R. Ballantyne, Engineer &
J. Dedmon, Drilling Foreman

Present condition of well: 13-3/8" cem. 765'; 8-5/8" cem. 3986' window 3139'-3174', side-
tracked @ 3142'; 5-1/2" cem. 3043'-5964'. TD 6540'. TD 1st hole 5450'. TD 2nd hole
5833'.

The operations were performed for the purpose of demonstrating the effectiveness of the seal
between the 8-5/8" and 5-1/2" casings.

Mr. Ballantyne reported:

1. A window was milled in the 8-5/8" casing from 3139' to 3174', and the hole was opened to 12-3/4" in that interval.
2. Sand fill was cleaned out of the 5-1/2" casing to 4165'.
3. On July 2, 1967, 30 sacks of cement was pumped into the hole through drill pipe and tubing hanging at 4147', calculated to fill to 3908'.
4. On July 2, 1967, 70 sacks of cement mixed with 20% sand was pumped into the hole through drill pipe and tubing hanging at 3233'.
5. Cement was drilled out of the hole from 3077' to 3142'.
6. A 7-5/8" hole was redrilled from 3142' to 5833'.
7. On July 13, 1967, 160 sacks of cement mixed with 20% sand was pumped into the hole through drill pipe and tubing hanging at 5460'.
8. Cement was drilled out of the hole from 4997' to 5094'.
9. A 7-5/8" hole was redrilled from 5094' to 6540'.
10. On July 20, 1967, 5-1/2", 15.5 lb. casing was cemented from 3043' to 5964' with 743 cubic feet of cement slurry (1:1 pozmix, 2% gel).
11. Cement was drilled out of the 8-5/8" casing to 3043' and the 5-1/2" casing was cleaned out to 5922'.
12. A Cook tester was run into the hole on 3-1/2" drill pipe and packer set at 3009', with tailpiece to 3020'.
13. The tester valve with 5/8" bean was open for 1 hr. During this interval there was a weak blow for 2 minutes and no blow thereafter.

THE ENGINEER NOTED:

1. When the drill pipe was removed, 45' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED and indicate that no fluid has access to the well from the annulus between the 8-5/8" and 5-1/2" casings.

E. R. MURRAY-AARON
State Oil and Gas Supervisor

SC:nw
cc Company

By [Signature]

Deputy

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 167-705

Mr. C. G. Willis
417 S. Hill Street
Los Angeles, California 90013
 Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
July 5, 1967

DEAR SIR:

(037-06496)

Your proposal to redrill Well No. "Oil Operators" 3,
 Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
 dated June 27, 1967 received June 29, 1967, has been examined in conjunction with records filed in this office.
 Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 5450
2. Complete casing record, including plugs:
 13-3/8" C 765'
 8-5/8" C 3986' WSO
 5-1/2" C 5446', top 3928', WSO on splice. Bad 4195 & 5107', plgd.
 perf. & plgd. 4190-4205', 4852-4950', 5140-5180',
 5190-5200', 5306-5355'.
 Plug 4159'. Perf. 4080-4158'.
3. Last produced.

12/12/66	10	182	-
(Date)	(Oil, B/D)	(Water, B/D)	(Gas)

 "

PROPOSAL

"The proposed work is as follows:

1. Move in drilling equipment, pull tubing, install BOPE and fill hole with mud.
2. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 12-3/4" lay cement plug from 4150' to 3900' (sufficient to cover perforations without having to wait and feel for top) and another plug from 100' below section back above top of window and level off plug 2' into section.
3. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 5900'.
4. Run and cement 5-1/2" liner, effect. W.S.O. at lap of 8-5/8" casing and above productive horizon.
5. Complete well."

DECISION

THE PROPOSAL IS APPROVED PROVIDED:

1. Fluid consistent with good drilling practice shall be used, and the column of fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
 - a. A test, after cleaning out below the top of the liner to demonstrate that no fluid has access to the well from the annulus between the 8-5/8" and 5-1/2" casings.
 - b. A test of the effectiveness of the 5-1/2" shut-off above the zone to be produced.

WLI:mw
 cc Company

Bond No. 1411161
 Dated 6-27-67

E. R. MURRAY-AARON, State Oil and Gas Supervisor

By [Signature], Deputy

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED

JUN 29 1967

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well, CALIFORNIA

This notice must be given before work begins; one copy only

Los Angeles, Calif. June 27, 1967

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to
(037-06496)
commence the work of ~~deepening, redrilling, plugging or altering casing~~ at Well No. "Oil Operators" 3
(Cross out unnecessary words)

, Sec. 13, T. 4 S, R. 13 W, S.B. B. & M.

Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 5450

2. Complete casing record, including plugs:

13-3/8" C 765'

8-5/8" C 3986' WSO

5-1/2" C 5446', top 3928', WSO on splice. Bad 4195 & 5107', plgd.
Perf. & plgd. 4190-4205', 4852-4950', 5140-5180',
5190-5200', 5306-5355'.
Plug 4159'. Perf. 4080-4158'.

3. Last produced. 12/12/66 10 182 -
(Date) (Oil, B/D) (Water, B/D) (Gas)

The proposed work is as follows:

1. Move in drilling equipment, pull tubing, install BOPE and fill hole with mud.
2. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 12-3/4" lay cement plug from 4150' to 3900' (sufficient to cover perforations without having to wait and feel for top) and another plug from 100' below section back above top of window and level off plug 2' into section.
3. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 5900'.
4. Run and cement liner, effect W.S.O. at lap of 8-5/8" casing and above productive horizon. 5 1/2"
5. Complete well.

Redrill

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			#1411161 6-27-67	as	as

417 S. Hill Street, Los Angeles

(Address)

628-2156

(Telephone No.)

GENERAL EXPLORATION COMPANY OF CALIFORNIA

By *R. S. Ballantyne*
(Name of Operator)
R. S. Ballantyne, Vice President

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or County **Long Beach** District **1**
Former Owner: **Union Oil Co. of California** Date **January 17, 1961**
Description of Property **Sec. 13, T. 4 S., R. 13 W., S. 2. S. 2 E.**

List of Wells **"Oil Operators" 1, "Oil Operators" 2, "Oil Operators" 3 and "Oil Operators" 4. ("Oil Operators" 1, 181e; other wells are active)**

Date of Transfer **January 1, 1961**
New Owner: **General Exploration Co. of California**
Address: **730 Subway Terminal Building, 417 South Hill Street, Los Angeles 13, Calif.**

Telephone No.

Type of Organization **Corporation**
Reported by: **Union Oil Co. of California (Letter of January 6, 1961)**
Confirmed by: **General Exploration Co. of California (Letter of January 11, 1961)**
New Operator New Status **PA**, Old Operator New Status **PA**
Request designation of agent **No**

Remarks:

eb
cc- Mr. E. H. Hesser
Prod. Dept.
Conservation Committee

	INITIALS	DATE
Form 121		
New Well Cards		
Well Records		
Electric Logs		
Production Reports		
Map and Book		
Form 148		
Notice to be cancelled		

Wm. C. Bickley

Deputy Supervisor

LEGEND
PA—Producing Active
NPA—Non Potential Active
PI—Potential Inactive
NPI—Non Potential Inactive
Ab—Abandoned or No More Wells
NOTE—If Transfer Does Not Change Overall Status Enter "No Change"

Form 10

CLERK

RECEIPT FOR

Date Received 1-13-60 Form 100 101 103 : New Well Records

Elec. Log Radio Log : Subsequent Work

Direct. Surv. Other Data History : Well Summary

Location : (100)

 : Drillers Log

Elevation Clerk Scott : (101)

Prod. Repts. Clerk : Core Record

COMPLETED PRODUCING ON 12-10-59 : History

ABANDONED ON : (103)

BOND Handwritten Release Date Elig. 150b : Elec. Log

End Prem. year Release Requested Superseded : Other

Aband. : Redrill

HOLD BOND Reason : Deepen

 : Plug

Data Needed : Alter Csg.

 Final Letter Eng. RC : Abandon

DIVISION OF OIL AND GAS
UNION OIL COMPANYDIVISION OF OIL AND GAS
RECEIVED

JAN 1 1958

WELL NO. Oil Operators #3Long Beach
(FIELD)Los Angeles
(COUNTY)History of Oil or Gas Well
REPAIR REPORTProd. Hoist - Contract
(TOOLS)INGLEWOOD, CALIFORNIASee belowSEC. 13 T. 4-S R. 13-W S.E. B. & M.December 7, 1959

(PERIOD ENDING)

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1959			
				<u>CHARGE: BR-AFE 59359 Job 540</u> <u>PROPOSED WORK: Add perforations in the Alamitos Zone.</u> <u>PRODUCTION BEFORE WORK: Idle</u> <u>ZERO POINT FOR THIS JOB: 9.1' above concrete pad.</u>
				<u>CASING RECORD AT START OF WORK:</u> TD 4076' : Dpnd 5450' : Plug 4985' 13-3/8" C 765' 8-5/8" C 3986' WSO 116-6-5/8" H-4075' incl. -89' -pf. Fulled. 1518' 5-1/2" F & C 5446'. Bad 4195 & 5107'. WSO test on splice OK. bullet pf 4190-4205, 4852-4950'. " " & plgd 5140-5180, 5190-5200, 5306-5355'.
				<u>CASING RECORD AT COMPLETION OF WORK:</u> TD 4076' : Dpnd 5450' : Plug 4159' 13-3/8" C 765' 8-5/8" C 3986' WSO 116-6-5/8" H-4075' incl. -89' -pf. Fulled 1518' 5 1/2" F & C 5446'. Bad 4195 & 5107' Flgd. WSO test on splice OK. Bullet pf & plgd 4190-4205, 4852-4950' 5140-5180, 5190-5200, 5306-5355'. bullet pf 4080-4158'.
1	12-2	Dpnd 5450	Plug 4985	Contractor moved in and rigged up. Fulled rods and pump. Dia-Loyed tubing.
1	12-3	"	"	Pulled tubing. Strung in with 2-5/8" Cavins sand pump to 4201', top of fill. 4-5/8" impression block stopped at 3927'. 4-1/4" block stopped at 3927'. 3-3/4" block stopped at 3927'. Ran in with 2-5/8" Cavins sand pump, went to 4201'. Fluid level at 500'.
2	12-4	"	"	Ran in with 1-7/8" x 4-1/8" x 2.59' Haash-koss tapered mill on 3-1/2" bumper sub on 2-1/2" tubing on 3" tubing. Ran in to top of liner at 3927'. Pipe did not appear to be bad. Ran in to 4186' where mill stopped. Fulled back up to top of liner and worked mill through liner hanger repeatedly. Pulled out. Ran L-W Cemoton and Chlorinilog.
1	12-5	"	"	Finished running L-W Cemoton and Chlorinilog.
	12-6			Crew off.
2	12-7	"	4200	Ran in with 7 1/2" impression block to top of liner at 3928'. No impression. Ran impression block to top of liner. Bailed sand and shale at 4201' with 2-5/8" Cavins sand pump. Bailer sticking badly at 4201'. Recovered small loads. Bright spot on bottom of bailer indicates possible tight pipe. <u>Dumped 1 1/2" sacks construction cement at 4201' at 2:30 p.m.</u> Felt for cement at 5:30 p.m. Top of cement at 4200'.

NAMES OF DRILLERS/HEAD WELL PULLERS:

California Production Service - Contractor

Vaughn S. Meyer
DISTRICT ENGINEER

DIVISION OF OIL AND GAS
UNION OIL COMPANY

CASING RECORD

WSO

WELL NO. Oil Operators #3Long beach

(FIELD)

Los Angeles

(COUNTY)

SEC. 13, T. 4-S, R. 13-W.S.B. & M.December 20, 1959

(PERIOD ENDING)

13-3/8" C 765' : 8-5/8" C 3986
116-6-5/8" H-4075' - 100-80' - 111d
1518' 5-8" F & C 5446. Had 4195-8-5107,
Hltd. #30 test on splice OK
bullet pf & plgd 4190-4205, 4862-4950
5140-5180, 5190-5200, 5206-5255
bullet pf 4080-4158'.

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																																																				
	1959																																																																																							
1	12-8	Dpnd 5450	Plug 4200	Ran in with Cavins off bottom cement dump bailer and <u>dumped 2 sacks construction cement at 4200'</u> at 9:30 a.m. Felt for top of cement with bailer jars at 12:30 p.m. No fill. <u>Dumped 2 sacks construction cement at 4200'</u> at 1:30 p.m. Felt for top of cement at 4:30 p.m. No fill. <u>Dumped 2 sacks of construction cement at 4200'</u> at 5:45 p.m.																																																																																				
1	12-9	"	" 4159	Ran in with jars and found top of cement at 4200'. <u>Mixed 4 sacks of construction cement and dumped in 2 runs at 4200'</u> . Finished dumping cement at 9:00 a.m. Felt for plug at 12:00 noon. Located top of plug at 4174'. Rigged up to shoot.																																																																																				
2	12-10	"	" 4159	<u>Perforated 5-1/2" liner from 4158-4080' with two 1/2" bullets per foot.</u> Used L-W 4" x 50 shot wire line gun. Checked collars and reset odometer according to collars. <u>Located top of plug at 4159'</u> . Fluid level stayed at 540' during shooting job. No blow. All guns came from hole covered with oil. Had 2 scattered missfires. Checked bottom at 4159' after shooting. Removed blow-out preventer. Ran in and landed tubing. Ran rods. Put well on production. Contractor moved out.																																																																																				
				<u>PRODUCTION DATA</u>																																																																																				
				<table><tr><th>Hrs</th><th>Gross</th><th>Net</th><th>Cut</th><th>Gray.</th><th>MCF</th><th>Remarks</th></tr><tr><td>12-10</td><td>132</td><td></td><td></td><td></td><td></td><td>No cut obtained.</td></tr><tr><td>12-11</td><td>175</td><td>107</td><td>39.0</td><td>23.3</td><td>Tr.</td><td></td></tr><tr><td>12-12</td><td>134</td><td>82</td><td>39.0</td><td>23.3</td><td>"</td><td></td></tr><tr><td>12-13</td><td>168</td><td>102</td><td>39.0</td><td>23.3</td><td>"</td><td></td></tr><tr><td>12-14</td><td>167</td><td>90</td><td>46.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-15</td><td>107</td><td>66</td><td>38.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-16</td><td>98</td><td>61</td><td>38.0</td><td>23.3</td><td>20</td><td>1020' fluid over pump by Sonic</td></tr><tr><td>12-17</td><td>95</td><td>57</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-18</td><td>118</td><td>71</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-19</td><td>131</td><td>79</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-20</td><td>134</td><td>80</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr></table>	Hrs	Gross	Net	Cut	Gray.	MCF	Remarks	12-10	132					No cut obtained.	12-11	175	107	39.0	23.3	Tr.		12-12	134	82	39.0	23.3	"		12-13	168	102	39.0	23.3	"		12-14	167	90	46.0	23.3	20		12-15	107	66	38.0	23.3	20		12-16	98	61	38.0	23.3	20	1020' fluid over pump by Sonic	12-17	95	57	40.0	23.3	20		12-18	118	71	40.0	23.3	20		12-19	131	79	40.0	23.3	20		12-20	134	80	40.0	23.3	20	
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12-15	107	66	38.0	23.3	20																																																																																			
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12-17	95	57	40.0	23.3	20																																																																																			
12-18	118	71	40.0	23.3	20																																																																																			
12-19	131	79	40.0	23.3	20																																																																																			
12-20	134	80	40.0	23.3	20																																																																																			
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NAMES OF DRILLERS/HEAD WELL PULLERS:

California Production Service - Contractor

Vaughn S. Meyer
DISTRICT ENGINEER

COMPLETED PRODUCING ON 12-10-59

ABANDONED ON _____

Cordova/Ballantyne 7-2-67

Solid sand at 4000'.

O.K. to p/c 4000'-3878'; using 100%
excess per conversation with Ingram
on 6-29-67.

Ballantyne/Ingram 6-29-67

will use 100% excess on zone plug
in lieu of feeling for top - O.K. w/2

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P 159-888

Mr. C. F. Bowden
P. O. Box 7600
Los Angeles 54, California
Agent for UNION OIL COMPANY OF CALIFORNIAInglewood 3, Calif.
October 22, 1959

DEAR SIR:

Your _____ proposal to alter casing Well No. "Oil Operators" 3,
Section 13, T. 4 S, R. 13 W, S B B. & M., Long Beach Field, Los Angeles County,
dated Oct. 19, 1959, received Oct. 21, 1959, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.
Plugged with cement 5446'-5428' and 5101-4984'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 4076' Dpnd 5450' Plug 4985'
2. Complete casing record.
13-3/8" C 765'
8-5/8" C 3986' WSO
116'-6-5/8"-H-4075' incl. -89'-pfs., pulled.
1518' 5-1/2" F & C 5446'. Bad 4195' & 5107'.
WSO test on splice OK.
Bullet pf. 4190-4205' & 4852-4950'.
Bullet pf. & plgd. 5140-5180', -5190-5200', -5306-5355'.
3. Last produced. April 1958 2 B/D 23.7° 98.0%
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL

"The proposed work is as follows:

1. Pull rods and tubing.
2. Check hole open to top of plug at 4985'.
3. Check condition of 5-1/2" liner with impression blocks.
4. Perforate 5-1/2" liner from 4080-4185' with two 1/2" bullets per foot.
5. Check hole open to top of plug at 4985'.
6. Run rods and tubing.
7. Test on production."

DECISION

THE PROPOSAL IS APPROVED.

RC:omh

cc Vaughn S. Moyer Div. Eng.
9645 South Santa Fe Springs Rd.
Santa Fe Springs, California

E. H. MUSSER, State Oil and Gas Supervisor

By Wm. C. Bailey, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

OCT 21 1959

INGLEWOOD, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Santa Fe Springs, Calif.		October 19, 1959	
DIVISION OF OIL AND GAS	MAP	MAP BOOK	CARDS
Inglewood, Calif.			BOND
			FORMS
			114 121

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. OIL OPERATORS #3

(Cross out unnecessary words)

_____, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 4076' Dpnd 5450' Plug 4985'
- Complete casing record.
13-3/8" C 765'
8-5/8" C 3986' WSO
~~116 1-6-5/8" H 4075' incl. 89' pfs., pulled.~~
1518' 5-1/2" F & C 5446'. Bad 4195' & 5107'.
WSO test on splice OK.
Bullet pf. 4190-4205' & 4852-4950'.
Bullet pf. & plgd. 5140-5180', 5190-5200', 5306-5355'.

3. Last produced. April 1958 2 B/D 23.7° 98.0%
 (Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

- Pull rods and tubing.
- Check hole open to top of plug at 4985'.
- Check condition of 5-1/2" liner with impression blocks.
- Perforate 5-1/2" liner from 4080-4185' with two 1/2" bullets per foot.
- Check hole open to top of plug at 4985'.
- Run rods and tubing.
- Test on production.

Union Oil Company of California

(Name of Operator)

By

V. S. Meyer R.S.H.
Vaughn S. Meyer, Division Engineer

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

rjh

STENOGRAPHER

: RECEIPT FOR

Date Received 7-30-53 Form 100 101 103

: Well Summary

Elec. Log _____ Radio Log _____

: Drillers Log

Direct. Surv. _____ Other Data History

: Core Record

Location _____

: History ✓Elevation _____ Steno. scat

: Elec. Log

ENGINEER

: Radio Log

BOND Blanket Release _____ Date Elig. 150b

: Direct. Surv.

End Prem.Yr. _____ Release Requested _____ Superseded _____ Aban. _____

: Redrill

HOLD BOND _____ Reason _____

: Deepen

Data Needed None: Plug ✓Final Letter _____ Eng. 7-30-53: Alter Csg. ✓

: Abandon

LLW

VISION OF OIL AND GAS

UNION OIL COMPANY
History of Oil or Gas Well

REPAIR REPORT

Prod. Hoist - Contract

(TOOLS)
July 8, 1953

(PERIOD ENDING)

CASING RECORD 1053

See below

LOS ANGELES, CALIFORNIA

(NOTE INEFFECTIVE CASING)

Oil Operators #3

WELL NO.

Long Beach

(FIELD)

Los Angeles

(COUNTY)

13 4-8 13-W S.B.

SEC. T. R. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	CHARGE: B.R.-A.F.E. 51528 Job 231-0	REMARKS
	1953				<u>PROPOSED WORK:</u> Cement off bottom perforations with plug from 5107' to 5000'. Test on production. If upper perforations not causing sand, gun perforate 5-1/2" casing from 4950' to 4852' with four 1/2" holes/ft. <u>PRODUCTION BEFORE REPAIR:</u> 57 B/D Gross - 14 B/D Net - 75.0% Cut <u>ZERO POINT</u> for this job: 9' 1" above concrete pad. <u>CASING RECORD AT START OF WORK:</u> 8-5/8" Dpn 5150' 13-3/8" C 765' 8-5/8" C 3986' WSO 226-6-5/8" H 4975' inc 89' perf. Pulled 1518' 5-1/2" F & C 5146' Bad 4195' & 5107' WSO test on splice OK Bullet perf. 4190-4205' Bullet perf. & plugged 5140-5180, 5190-5200, 5306-5355' <u>CASING RECORD AT COMPLETION OF WORK:</u> 8-5/8" Dpn 5150' Plug 4985' 13-3/8" C 765' 8-5/8" C 3986' WSO 226-6-5/8" H 4975' inc 89' perf. Pulled 1518' 5-1/2" F & C 5146' Bad 4195' & 5107' WSO test on splice OK Bullet perf. 4190-4205' and 4852-4950' Bullet perf. & plugged 5140-5180, 5190-5200, 5306-5355'
1	7-6	5150	Plug 4955	California Production Service, Contractors, moved in and set up equipment. Tested tubing - OK. Pulled tubing and rods. Tubing measured 4179.72'. Ran 2-5/8" Cavins bailer. Checked fill at 4938'. Fluid level at 3685'. Cleaned out to 4955'.	
1	7-7	5150	Plug 4985	Continued cleaning out sand to 4985'. Installed Shaffer blow-out preventer. Ran in with Lane-Wells 4" x 13' type A-2 bullet gun, shot four 1/2" holes/foot from 4950' to 4852'. Had light blow and rapid fluid rise. Fluid level at start of shooting 3425'; fluid level at finish 3220'.	
1	7-8	5150	Plug 4985	Blid off 35# casing pressure. Ran 2-5/8" Cavins sand pump. Checked fill at 4963'. Fluid level at 3170'. Cleaned out to 4985'. Ran in and landed 4788' of mixed 2-1/2" and 3" tubing. Ran rods and pump. Contractor moved out July 8, 1953. Well on production at 5:30 P.M.	

NAMES OF DRILLERS/HEAD WELL PULLERS:

Calif. Prod. Service, Contractors

Chas. F. Bowden

DISTRICT ENGINEER

VISION OF OIL AND GAS

UNION OIL COMPANY
History of Oil or Gas Well

CASING RECORD

REPAIR REPORT

See previous sheet

Prod. No. 1 - Contract

(TOOLS)

July 26, 1953

(PERIOD ENDING)

(NOTE INEFFECTIVE CASING)

WELL NO. Oil Operators #3
Long Beach
(FIELD)
Los Angeles
(COUNTY)
13 4-S 13-W S.B.
SEC. 1 T. 1 R. 1 B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS						
		<u>5150</u>	<u>Plug 4985</u>							
			<u>Hours</u>	<u>Gross</u>	<u>Net</u>	<u>Cut</u>	<u>PRODUCTION DATA</u>			
				<u>Gross</u>	<u>Net</u>	<u>Cut</u>	<u>Gross</u>	<u>Net</u>	<u>Remarks</u>	
	7-8		13	35	0	100.0				
	7-9		24	78	0	100.0				
	7-10		24	95	34	63.0				
	7-11		24	76	32	58.0		25		
	7-12		24	76	27	64.0		22		
	7-13		24	66	17	75.0		8		
	7-14		24	72	37	48.0	23.1	8		
	7-15		0							
1	7-16			Sanded up						
1	7-17			Union Oil production crew pulled rods and tubing.						
1	7-18			Cleaned out 4725-4757' with 3-1/8" Cavins sand pump.						
1	7-19			Cleaned out 4757-4820' with 3-1/8" Cavins sand pump.						
1	7-20			Cleaned out 4820-4985' with 3-1/8" Cavins sand pump. Recovered shale and pieces of iron. Fluid level 3300'. Ran tubing to 4200'.						
				Cleaned out off bottom with 3-1/8" Cavins sand pump. Ran tubing to 1900'.						
1	7-21		17	69	44	36.0				
	7-22		24	91	46	49.0				Ran rods. Put well on prod.
	7-23		24	91	61	33.0	23.8			
	7-24		24	82	45	45.0	23.6	2		
	7-25		24	73	37	49.0		2		
	7-26		24	69	35	49.0	23.7	2		

NAMES OF DRILLERS/HEAD WELL PULLERS:

Call. Prod. Service, Contractors, to 7-8-53.
Union Oil Prod. Crew 7-16-53 to 7-21-53

Chas. F. Bowden

DISTRICT ENGINEER

STENOGRAPHER

Date Received 7-3-53 Form 100 101 103
 Elec. Log _____ Radio Log _____
 Direct. Surv. _____ Other Data History
 Location _____
 Elevation _____ Steno. EB

ENGINEER

EB BOND Blanket Release _____ Date Elig. 150b
 End Prem.Yr. _____ Release Requested _____ Superseded _____ Aban. _____
 HOLD BOND _____ Reason _____
 Data Needed None
 Final Letter _____ Eng. VLW

: RECEIPT FOR
 : Well Summary _____
 : Drillers Log _____
 : Core Record _____
 : History ✓
 : Elec. Log _____
 : Radio Log _____
 : Direct. Surv. _____
 : _____
 : Redrill _____
 : Deepen _____
 : Plug ✓
 : Alter Csg. ✓
 : Abandon _____

7-6-53

DIVISION OF OIL AND GAS
UNION OIL COMPANY

DIVISION OF OIL AND GAS
RECEIVED
CASING RECORD

WELL NO. 011 Operators #3
Long Beach
(FIELD)
Los Angeles
(COUNTY)
SEC. 13 T. 4-S R. 13-W S.B. B. & M.

History of Oil or Gas Well
REPAIR REPORT

Prod. Hoist - Contract
(TOOLS)
June 21, 1953
(PERIOD ENDING)

JUL 3 1953

LOS ANGELES, CALIFORNIA

See below

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1953			CHARGE: B.R.-A.F.E. 51528 Job 231-0
				<u>PROPOSED WORK:</u> Plug back all existing perforations in R, S and T Zones and test well on production.
				<u>PRODUCTION BEFORE REPAIR:</u> 41 B/D Gross - 13 B/D Net - 22.8° - 67.3%.
				<u>ZERO POINT for this job:</u> 9'1"
				<u>CASING RECORD AT START OF WORK:</u> 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' F & C 5446' : Bad 4195' & 5107' WSO test on splice OK : Bullet pf 4190-4205', 5140-5180', 5190-5200', 5306-5355'.
				<u>CASING RECORD AT COMPLETION OF WORK:</u> 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' F & C 5446' : Bad 4195' & 5107' : WSO test on splice OK : Bullet pf 4190-4205'. Bullet pf & plgd 5240-5280', 5290-5300', 5306-5355'.
1	6-8	5450	Plug 5428 Bad 5101	California Production Service, Contractor, moved in and installed blow-out preventer. Checked bottom with 2-5/8" Cavins sand pump at 5101'. Fluid level at 810'. Ran in with 7-1/2" impression block. Checked 5-1/2" liner hanger at 3925'. Ran in with 4" impression block - went to 5100' - no marks.
1	6-9	"	Plug 4983 Bad 5101	Ran in with Cavins continuous dump bottom bailer. Dumped 11 sacks of construction cement in 5-1/2" casing, starting at 5101'. Let stand 4 hours. Felt top of plug at 4983'.
1	6-10	"	Plug 4985	Ran in with 2-5/8" Cavins sand pump. Bailed loose cement at 4983' to hard cement at 4985'. Witnessed and approved by Division of Oil and Gas. Started running tubing.
1	6-11	"	Plug 4985	Ran tubing and started running rods.
1	6-12	"	" "	Finished running rods. Put well on pump. Contractor released.
<u>PRODUCTION DATA</u>				
			<u>Hours</u>	<u>Gross</u> <u>Net</u> <u>Cut</u> <u>Grav.</u>
6-12			16 1/2	113 0 100.0
6-13			23	96 0 100.0
6-14			24	67 0 100.0
6-15			24	82 0 100.0
6-16			24	78 1 97.0 23.8
6-17			24	75 22 71.0 23.2
6-18			24	66 18 73.0
6-19			24	56 15 73.0
6-20			24	57 14 75.0
6-21			24	57 14 75.0

NAMES OF DRILLERS/HEAD WELL PULLERS:

California Production Service, Contractor.

Chas. F. Bowden

DISTRICT ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 153-737

Los Angeles 15
Calif. June 18 19 53

Mr W S Eggleston
1109 Union Oil Building
LOS ANGELES 17
Agent for UNION OIL CO OF CALIFORNIA Calif.

DEAR SIR:

Operations at your well No. "Oil Operators" 3 Sec. 13, T. 4 S, R. 13 W, S B B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
J. R. Thomas, Inspector, representative of the supervisor,
on June 10, 19 53. There was also present R. J. Wilson, Driller;
Ray Hothan, Helper.

Casing Record <u>13-3/8" cem. 765'; 8-5/8" cem. 3986';</u>	Junk <u>None</u>
<u>W.S.O.: 5 1/2" 1d. 3928'-5446', perf. 4190'-4205', 5140'-</u>	
<u>5180', 5190'-5200', and 5306'-5355'. T.D. 5450', plugged</u>	
<u>with cement 5446'-5428' and 5101'-4984'.</u>	

The operations were performed for the purpose of testing the location and hardness of a cement
plug placed from 5101' to 4984' in the process of plugging back.

The inspector arrived at the well at 10:45 a.m. and Mr. Wilson reported:
that on June 9, 1953, 11 sacks of cement was dumped into the hole beginning at 5101'.

THE INSPECTOR NOTED THAT the bailer could not be spudded below 4984' and brought up a
sample of set cement.

The test was completed at 11:30 a.m.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 4984' ARE APPROVED.

JRT:OH

cc Long Beach

Mr C F Bowden Div Engineer
Union Oil Co of California
9645 South Santa Fe Springs Road
WHITTIER California

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. Messer

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P 153-666

Los Angeles 15

Calif.

May 28

19 53

Mr. W S Eggleston

Los Angeles 17

Calif.

Agent for UNION OIL CO OF CALIFORNIA

DEAR SIR:

"Oil Operators"

Your proposal to plug & alter casing Well No. 3

Section 13, T. 4 S, R. 13 W, S B B. & M., Long Beach Field, Los Angeles County,

dated May 26 19 53, received May 27 19 53, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE

The hole is plugged with cement 5446'-5428'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth - 4076'
Deepen - 5450'

2. Complete casing record.

13-3/8" C 765'

8-5/8" C 3986' W.S.O.

~~1161-6 5/8" H 40751 line, 891 perf., pulled~~

1518' 5-1/2" F & C 5446', Bad 4195' & 5107'

W.S.O. test on splice O.K.

Bullet perf: 4190-4205, 5140-5180, 5190-5200, 5306-5355'

3. Last produced. April 1953 13 B/D 22.8 67.3%
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL

"The proposed work is as follows:

1. Plug 5-1/2" casing with cement from 5107' to 5000'.
2. Test on production.
3. Gun perforate 5-1/2" casing from 4950-4852'.
4. Test on production."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT

1. Plugging operations shall start from as deep as possible.
2. THIS DIVISION SHALL BE NOTIFIED TO WITNESS the location and hardness of cement plug at 5000'.

JLW:OH

cc W S Eggleston
C F Bowden
Long Beach

R. D. BUSH

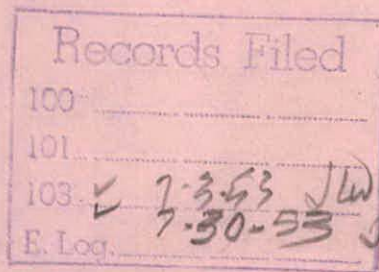
State Oil and Gas Supervisor

By

E. H. Meuser

Deputy

Blanket bond.



STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

MAY 27 1953

LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Whittier

Calif.

May 26

19 53

DIVISION OF OIL AND GAS

Los Angeles

Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling,~~ [&] plugging ^{Oil Operators #3} or altering casing at Well No. _____

(Cross out unnecessary words)

_____, Sec. 13, T. 4-S, R. 13-W, S. B. B. & M.

Long Beach

Field,

Los Angeles

County.

The present condition of the well is as follows:

- Total depth. - 4076'
Deepen - 5450'
- Complete casing record.
13-3/8" C 765'
8-5/8" C 3986' W.S.O.
~~116 1/2-6-5/8" H 4075' inc. 891' perf. & pulled~~
1518' 5-1/2" F & C 5446', Bad 4195' & 5107'
W.S.O. test on splice O.K.
Bullet perf: 4190-4205, 5140-5180, 5190-5200, 5306-5355'

- Last produced. April 1953 13 B/D 22.8° 67.3%
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

- Plug 5-1/2" casing with cement from 5107' to 5000'.
- Test on production.
- Gun perforate 5-1/2" casing from 4950-4852'.
- Test on production.

Plug + alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS
				114 121

Blanket JEB

UNION OIL CO. OF CALIFORNIA

(Name of Operator)

By

C. F. Bowden

C. F. BOWDEN, Division Engineer.

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STENOGRAPHER

Transcript in Kato Will

Date Received 7-29-48 Form 100 101 103

Elec. Log _____ Radio Log _____

Direct.Surv. _____ Other Data _____

Location _____

Elevation _____ Steno. Death

ENGINEER

Q BOND Blanket Release _____ Date Elig. _____ 150b _____

End Prem.Yr. _____ Release Requested _____ Superseded _____ Aban. _____

HOLD BOND _____ Reason _____

Data Needed Trace

Final Letter _____ Eng. SHR

8-2-48

STENOGRAPHER

Date Received 5-1-48 Form 100 101 103

Elec. Log _____ Radio Log _____

Direct. Surv. _____ Other Data _____

Location _____

Elevation _____ Steno. Scott

ENGINEER

BOND Blanket Release _____ Date Elig. _____ 150b _____

End Prem. Yr. _____ Release Requested _____ Superseded _____ Aban. _____

HOLD BOND _____ Reason _____

Data Needed TrueFinal Letter _____ Eng. SMR5-13-48

DIVISION OF OIL AND GAS

WELL NO. Oil Operators #3
Long Beach
(FIELD)
Los Angeles
(COUNTY)
13 4-S 13-N S.B.
SEC. 13 T. 4-S R. 13-N S.B. B. & M.UNION OIL COMPANY
History of Oil or Gas Well

REPAIR REPORT

Portable Hoist

(TOOLS)

February 24, 1948

13-3/8" CASING RECORD
8-5/8" C 3986' O.K.
1918' 5-1/2" C 5426'
(Fr. 5140-5180', 5190-5200',
5306-5355') Rgd with Bridge plug
Perf. 4190-4205'.

(PERIOD ENDING)

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS	FORMS		
	1948						
		Proposed work:		Plug off present perforation with temporary bridge plug. Test H-I Zone.	MAP BOOK CARDS BOND 121		
		Production:		November, 1947 8 B/D net - 23.0° - 64.1%	Sketches		
2	2-10	5450	Plg 5428	Rigged up. Pulled rods and tubing. Cleaned out from 5391' to 5428' with 3-1/8" Cavins bailer. Ran 4-1/2" impression block to 5426'.			
		"	"				
2	2-11	"	B.P. 4318	Set Baker bridge plug at 4327' - no fluid above plug. Dumped one sack cement at 4327'. Installed 6" control gate. Checked top of cement at 4318'. Dumped in 500 gallons of stove oil. Gun perforated 5-1/2" liner from 4190' to 4205' with two McCullough 1/2" holes per foot. Fluid level rose from 3918' to 3050' during shooting. Had a good gas blow.			
		"	"				
2	2-12	"	"	Located top of sand at 4283'. Cleaned out with 3-1/8" bailer to 4303'. Ran 4-1/2" impression block to 4210'. Ran 2-1/2" tubing to 4177'. Ran rods.			
		"	"				
1	2-13	"	"	Hooked up flow line. Put well on pump.			
				PRODUCTION DATA			
		Hours	Gross	Net	Cut	Gray.	Remarks
	2-14	24	44	19	56.0	23.0	Average Cut (old).
	2-15	24	19	8	56.0	23.0	
	2-16	24	10	4	56.0	23.0	
	2-17	24	17	7	56.0	23.0	
	2-18	24	14	6	56.0	23.0	
	2-19	0					Lowered tubing, changed pump.
	2-20	21	40	18	4.1	22.8	
	2-21	24	29	28	4.1	22.8	
	2-22	24	21	20	2.2	22.8	
	2-23	24	21	21	2.2	22.8	
	2-24	24	21	21	2.2	22.8	

DIVISION OF OIL AND GAS
RECEIVED
MAY 1 - 1948
LOS ANGELES, CALIFORNIA

NAMES OF DRILLERS/HEAD WELL PULLERS:

Santa Fe Springs Production

John R. Grasso

DISTRICT ENGINEER

DIVISION OF OIL AND GAS
UNION OIL COMPANY
History of Oil or Gas Well
REPAIR REPORT

011 Operators #3

WELL NO.

Long Beach

(FIELD)

Los Angeles

(COUNTY)

13 4-B 13-W S.B.

SEC. _____, T. _____, R. _____, _____ B. & M.

(TOOLS)

Apr 11 15, 1948

(PERIOD ENDING)

CASING RECORD

13-3/8" CASING

8-5/8" C 3986' O.K.

1518' 5-1/2 C 5446'

Pf. 5140-5180, 5190-5200,

5306-5355' & 4190-4205'

JUL 29 1948

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																																																																																								
	1948																																																																																																																											
				Proposed Work: Clean out bridge plug and return to production. Productions: 20 B/D net - 22.8° - 2.2%																																																																																																																								
1	3-24	5450	Plug 5428 Bridge plug 4318	Pulled rods and tubing. Shut well in.																																																																																																																								
1	3-25	5450	" "	Cleaned out from 4308' to 4316' with 2-5/8" bailer. Fluid level 3100'.																																																																																																																								
2	3-26	5450	Plug 5428	Ran in with chisel shoe and drilled out bridge plug. Cleaned out with bailer to 5428'. Recovered metal and sand.																																																																																																																								
1	3-27	5450	Plug 5428	Checked hole open to bottom. Ran tubing and rods. Put well on production.																																																																																																																								
				<u>PRODUCTION DATA</u>																																																																																																																								
				<table><tr><th>Hrs.</th><th>Gross</th><th>Net</th><th>Cost</th><th>Grav.</th><th>Remarks</th></tr><tr><td>3-28</td><td>27</td><td>27</td><td>1.1</td><td>22.8</td><td></td></tr><tr><td>3-29</td><td>30</td><td>30</td><td>1.1</td><td>22.8</td><td></td></tr><tr><td>3-30</td><td>30</td><td>30</td><td>1.1</td><td>22.8</td><td></td></tr><tr><td>3-31</td><td>48</td><td>47</td><td>1.1</td><td>22.8</td><td></td></tr><tr><td>4-1</td><td>30</td><td>30</td><td>1.5</td><td>22.8</td><td></td></tr><tr><td>4-2</td><td></td><td></td><td></td><td></td><td>Pulled rods and tubing.</td></tr><tr><td>4-3</td><td></td><td></td><td></td><td></td><td>Cleaned out sand from 5368' to 5428' with 2-5/8" Cavins bailer. Ran tbg</td></tr><tr><td>4-4</td><td></td><td></td><td></td><td></td><td>Ran rods & pump. Put well on prod.</td></tr><tr><td>4-5</td><td>24</td><td>68</td><td>67</td><td>1.5</td><td>22.8</td></tr><tr><td>4-6</td><td>24</td><td>68</td><td>67</td><td>1.5</td><td>22.8</td></tr><tr><td>4-7</td><td>24</td><td>43</td><td>42</td><td>1.5</td><td>22.8</td></tr><tr><td>4-8</td><td>24</td><td>4</td><td>4</td><td>1.5</td><td>22.8</td></tr><tr><td>4-9</td><td>24</td><td>45</td><td>44</td><td>1.5</td><td>22.8</td></tr><tr><td>4-10</td><td>24</td><td>33</td><td>33</td><td>1.5</td><td>22.8</td></tr><tr><td>4-11</td><td>24</td><td>3</td><td>3</td><td>1.5</td><td>22.8</td></tr><tr><td>4-12</td><td>24</td><td>2</td><td>2</td><td>1.5</td><td>22.8</td></tr><tr><td>4-13</td><td>24</td><td>28</td><td>28</td><td>1.5</td><td>22.8</td></tr><tr><td>4-14</td><td>24</td><td>40</td><td>39</td><td>1.5</td><td>22.8</td></tr><tr><td>4-15</td><td>24</td><td>66</td><td>65</td><td>1.5</td><td>22.8</td></tr></table>	Hrs.	Gross	Net	Cost	Grav.	Remarks	3-28	27	27	1.1	22.8		3-29	30	30	1.1	22.8		3-30	30	30	1.1	22.8		3-31	48	47	1.1	22.8		4-1	30	30	1.5	22.8		4-2					Pulled rods and tubing.	4-3					Cleaned out sand from 5368' to 5428' with 2-5/8" Cavins bailer. Ran tbg	4-4					Ran rods & pump. Put well on prod.	4-5	24	68	67	1.5	22.8	4-6	24	68	67	1.5	22.8	4-7	24	43	42	1.5	22.8	4-8	24	4	4	1.5	22.8	4-9	24	45	44	1.5	22.8	4-10	24	33	33	1.5	22.8	4-11	24	3	3	1.5	22.8	4-12	24	2	2	1.5	22.8	4-13	24	28	28	1.5	22.8	4-14	24	40	39	1.5	22.8	4-15	24	66	65	1.5	22.8
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NAMES OF DRILLERS/HEAD WELL PULLERS:

John R. Graser
DISTRICT ENGINEER

DISTRICT ENGINEER

Hmin 32 C,

"Oil Operators" #3

Sol [redacted] [redacted] [redacted]

12/24/47

ABH.

To perf. 4205' - 4190'

later on if not enough to perf.

up as high as 4050'

To temp, bridge off lower perf.
and if o.k. to take both
zones together

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-44335

Los Angeles 15, Calif. December 26, 1947

Mr. W. S. Eggleston

Los Angeles 14, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your _____ proposal to alter casing Well No. "Oil Operators" 3,
Section 13, T. 4 S., R. 13 W., S. B. B. & M., Long Beach Field, Los Angeles County,
dated Dec. 22, 1947, received Dec. 23, 1947, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.

Total depth 5450' - Plug 5428'

13-3/8" C 765'

8-5/8" C 3986'

1518' 5-1/2" F & C 5446' Perf. 5140-5180', 5190-5200' & 5306-5355'

2. Last produced	<u>Nov., 1947</u>	<u>8 B/D Ave.</u>	<u>23.0°</u>	<u>64.1%</u>
	(Date)	(Net Oil)	(Gravity)	(Cut)"

PROPOSAL:

"The proposed work is as follows:

1. Plug off perforations from 5140' to 5355' with a bridge plug.
2. Test H-I Zones by stages from 4200' to 4050'.
3. If O.K., knock out bridge plug and put on production."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT

1. It is understood that the bridge plug above the perforations 5355'-5140', does not fulfill the requirements of this division for the abandonment of the lower portion of the hole.
2. This division shall be kept informed of the results of tests after each stage of perforating, and will designate any requirements at that time.

SHR:OH

cc- John R. Fraser
Long Beach



R. D. BUSH

State Oil and Gas Supervisor

By EA Muscare Deputy

Blanket bond.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
DEC 22 1947
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Whittier Calif. Dec. 22 19 47

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at well No. Oil Operators #3
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S. B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.
Total depth 5450' - Plug 5428'
13-3/8" C 765'
8-5/8" C 3986'
1518' 5-1/2" F & C 5446' Perf. 5140-5180', 5190-5200' & 5306-5355'

2. Last produced Nov., 1947 8 B/D Ave. 23.0° 64.1%
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Plug off perforations from 5140' to 5355' with a bridge plug.
2. Test H-I Zones by stages from 4200' to 4050'.
3. If O.K., knock out bridge plug and put on production.

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			<i>Handbook</i>	<i>end</i>	<i>end</i>

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By John R. Fraser
John R. Fraser, Division Engineer

Address Notice to Division of Oil and Gas in District Where Well is Located

alter casing

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

5413
DIVISION OF OIL & GAS
RECEIVED
SEP 13 1941
LOS ANGELES, CALIFORNIA

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #3, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated December 31, 1937

_____, was filed. 116 SIGNED Henny E Winter
Date September 11, 1941 Title DIVISION ENGINEER
(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started; size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

CASING RECORD AT START OF WORK:

13-3/8" C. 765'
8-5/8" C. 3986', O.K.
116' 6-5/8" L. 4075', inc. 89' pf.

CASING RECORD AT END OF WORK:

13-3/8" C. 765'
8-5/8" C. 3986', O.K.
1518' 5 1/2" C. 5446'. Pf: 5140-5180'; 5190-5200';
5306-5355'

<u>1941</u>	<u>Depth</u>	<u>Eff. Depth</u>	<u>Remarks</u>
7-31	4076		Killed well with mud.
8-2	4080		Drilled through bottom of liner and ahead to 4080' with 5-5/8" bit. Cut 6-5/8" liner at 3976'.
8-3	4080		Recovered 18' 6-5/8" liner. Ran in double cup inverted 6-5/8" casing swab, changed from mud to oil, and washed perforations.
8-6	4170		Recovered remaining 98' of 6-5/8" liner, changed from oil to mud, and drilled ahead with 7-5/8" rock bit.
8-21	5131		Drilled ahead with 7-5/8" bits to 5131'. Hole was directionally controlled, using whipstocks at 4170', 4300', 4844', 4890', and 4977'. Ran Schlumberger survey.
8-25	5450		Continued drilling directionally controlled hole with 7-5/8" bits to 5450'. Coordinates of hole at 5449': 90.29' S., and 48.45' E. from the surface location of the hole. Ran Schlumberger survey. Ran in 1517.97' of new 5 1/2" Grade "C", 17# casing, including 83.44' new Grade "A", and 1.86' Burns 8-5/8"x5-1/2" liner hanger on top. Froze and cemented at 5446' with 285 sacks slow Colton cement.
8-29	5450	Plug 5428'	Found top of cement at 3685' and cleaned out cement to 5428'. Changed from mud to water and bailed fluid to 3011'. After standing 8 hours, found top of fluid at 3011', with no rise. Test was witnessed by D.O.G., and splice of liner approved. Changed from water to oil.

5446
1518
3929

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL & GAS
RECEIVED

SEP 13 1941

LOS ANGELES, CALIFORNIA

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #3, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated December 31, 1937, was filed.

SIGNED Henny E Winter

Date September 11, 1941

Title DIVISION ENGINEER
(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

1941	Depth	Eff. Depth	Remarks
8-31	5450	Plug 5428	Ran in Lane-Wells 4-3/8" casing gun perforator and perforated 5 1/2" casing from 5140-5180', 5190-5200', 5306-5355', with a total of 200 1/2" holes. Fluid level at surface during perforating.
9-1	5450	Plug 5428	Ran in rods and tubing and put well on the pump.

PRODUCTION DATA

	Gross	Net	Gravity	% Cut	Hours Pumped
9-1	145	123	22.3	15.5	12
9-2	141	107	22.3	24.2	24
9-3	129	110	22.3	15.0	24
9-4	117	105	22.3	10.5	24
9-5	129	116	22.3	9.9	24
9-6	122	110	22.3	9.9	24
9-7	119	109	22.3	8.7	24
9-8	113	104	22.3	8.4	24
9-9	114	104	23.1	8.4	23
9-10	99	90	23.1	8.6	24

MEASUREMENT DATUM

All measurements taken from top of rotary table, which is 22" above top of derrick floor. Top of derrick floor is 5' 1" above top of cement cellar, or 9' 1" above floor of cellar.

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
SEP 13 1941
LOS ANGELES, CALIFORNIA

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach
Well No. Oil Operators #3 Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

Henry E. Winter

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4076	4723	647'	Drilled		Sand and shale
4723	4732	9'	"		Sand with streaks of shale
4732	4959	227'	"		Sand and shale
4959	4967	8'	"		Shale
4967	5278	311'	"		Sand and shale
5278	5305	27'	"		Shale
5305	5450	145'	"		Sand and shale
		TOTAL DEPTH 5450'			

DIVISION OF OIL & GAS
RECEIVED
SEP 13 1941

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 3 WELL
Sec. 13, T. 4-S, R. 11-W, S. B. B&M LOCATION ELEVATION

[illegible]

STATE CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No.

8976

DIVISION OF OIL AND GAS

LOS ANGELES

Calif.

9/10 1941

Name of Operator

Union Oil Co of Calif

Address

LOS ANGELES

This is to acknowledge the receipt of logs and similar records of wells on Sec.

13 T. 43

R. 13W - Long Beach B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work

See log - "Oil Operators" 3 8/21/41 - 8/21/41

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By

E. H. Mueser

Deputy



att

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-40031

Los Angeles, Calif. September 10, 1941.

Mr. W. S. Eggleston,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 3 Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
James T. Carriel, Inspector, representative of the supervisor,
on August 29, 1941. There was also present H. E. Winter, Engineer, and
J. Kewish, Drilling Foreman.

Casing Record 13-3/8" cem. 765'; 8-5/8" cem. 3986';	Junk None.
W.S.O.; 5-1/2" cem. 3928'-5446'; T.D. 5450', plugged	
with cement 5450'-5428'.	

The operations were performed for the purpose of demonstrating that no fluid has access to the well
between the 8-5/8" and 5-1/2" casings,

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 6:30 P. M. AND MR. WINTER REPORTED THE FOLLOWING:

1. All of the 6-5/8" casing was recovered.
2. A 7-5/8" rotary hole was drilled from 4075' to 5450'.
3. On August 25, 1941, 1518' of 5-1/2" - 17 lb. casing was cemented at 5446' with 285 sacks of Slow Colton cement.
4. Cement was drilled out of the 8-5/8" and 5-1/2" casings from 3685' to 3938' and from 5226' to 5428'.
5. On August 29, 1941, at 10:00 a. m., the fluid was bailed to 3011'.

THE INSPECTOR NOTED THE FOLLOWING:

1. No fluid entered the well while standing 8 hr. for test.
2. The hole was open to 5428'.

The test was completed at 7:20 p. m.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT NO FLUID HAS ACCESS TO
THE WELL BETWEEN THE 8-5/8" AND 5-1/2" CASINGS.

cc- H. E. Winter
Long Beach
JTC:OH

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Mussen Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-36673

Los Angeles, Calif. July 28 1941.

Mr. W. S. Eggleston,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your _____ proposal to deepen _____ Well No. "OIL OPERATORS" 3,
 Section 13, T. 4S., R. 13W., S. B. B. & M., Long Beach Field, Los Angeles County,
 dated July 22, 1941, received July 24, 1941, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

Total depth 4076'

13-3/8" C 765'

8-5/8" C 3986' O. K.

116' 6-5/8" L 4075', inc. 89' perf.

Last production, June, 1941 - 764 oil, 9,521 water - 30 days.

It is desired to deepen to the "R-S" & "T" Zones."

PROPOSAL:

"The proposed work is as follows:

1. Pull 6-5/8" liner.
2. Deepen to approximately 5400 ft.
3. Cement solid 5-1/2" blank liner with top at approximately 3940 ft.
4. Test splice by Division of Oil & Gas.
5. Gun perforate "R-S" & "T" Zones as determined from electrical log.
6. Test on production."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be provided and ready for use at all times.
3. Any hole to be sidetracked in any oil zone shall be filled with cement, if possible.

cc- H. E. Winter

Long Beach

WJC:G

S/R.

R. D. BUSH

State Oil and Gas Supervisor

By

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JUL 24 1941
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well
This notice must be given fifteen days before work begins when possible

Santa Fe Springs Calif. July 22 19 41

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of deepening, ~~redrilling, plugging or altering casing~~ at well No. Oil Operators #3
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

Total depth 4076'
13-3/8" C 765'
8-5/8" C 3986' O.K.
116' 6-5/8" L 4075', inc. 89' perf.

Last production, June, 1941 - 764 oil, 9,521 water - 30 days
It is desired to deepen to the "R-S" & "T" Zones.

The proposed work is as follows:

1. Pull 6-5/8" liner.
2. Deepen to approximately 5400 ft.
3. Cement solid 5-1/2" blank liner with top at approximately 3940 ft.
4. Test splice by Division of Oil & Gas.
5. Gun perforate "R-S" & "T" Zones as determined from electrical log.
6. Test on production.

REFERENCE TO THIS NOTICE

Shape	Model	Cross Section	Order	Notes

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By

Henry E Winter
Division Engineer.

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JAN 11 1938
LOS ANGELES, CALIFORNIA

Pete Rosander

LOG OF OIL OR GAS WELL

Operator UNION OIL COMPANY OF CALIFORNIA Field LONG BEACH
Well No. OIL OPERATORS 3 *Nelson 83* Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.
Location 982' N-W'ly along the center line of the Pacific Electric Railway right of way from the center line of Bixby Road, projected and thence 271' S-W'ly at right angles Elevation 53.88

In compliance with the provisions of Chapter 718, Statutes of 1915, as amended, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date Dec. 31, 1937

Signed *Henry E. Winter*

(Engineer or Geologist) (Superintendent) Title District Engineer (President, Secretary or Agent)

Commenced drilling Nov. 5, 1937 Completed drilling Dec. 5, 1937 Drilling tools Cable Rotary

Total depth 4076 Plugged depth _____

GEOLOGICAL MARKERS		DEPTH
Wilbur shale		3695-3658
Alamitos shale		3790-3834
"H"		3953
"I"		3987

Commenced producing Dec. 5, 1937 Flowing/gas lift/pumping (cross out unnecessary words)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	367	23.5	1.5			
Production after 30 days	279	23.5	1.4			

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Casing landed in	Number of Sacks of Cement	Depth of Cementing if through perforations
13-3/8	765	Surface	45.97#	New	Smls.	C	17"	350	
8-5/8	3986	Surface	36#	New	Smls	C	12-1/4"	400	
6-5/8	4075	3959	26#	New	Smls	C	7-5/8"	-	

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
6-5/8	3986 ft.	4075 ft.	120 mesh	16	6"	Kobe
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths Schlumberger from 765 to 4076 (Attach Copy of Log)

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR UNION OIL COMPANY OF CALIFORNIA FIELD LONG BEACH

Well No. OIL OPERATORS 3, Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

Signed Henry E. Winter

Date Dec. 31, 1937 Title District Engineer
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

CASING RECORD AT START OF WORK:

CASING RECORD AT END OF WORK:

New well

13-3/8" 765
8-5/8" 3986 O.K.
116' 8-5/8" 4075', inc. 89' perf.

1937	Depth	Bff. Depth	Remarks
11-6	55		Spudded in and drilled with 17" rotary bit.
11-9	765		Drilled with 17" rotary bits to 765. Cemented new 13-3/8" 45.97# National seamless slipjoint casing at 765' with 350 sx Victor H.B.S. treated cement. Cementing operations witnessed and approved by Murray-Aaron of Division of Oil & Gas.
11-10	932		Found top of cement at 761. Drilled out cement and plugs to 765' and drilled ahead with 12-1/4" bits.
11-24	3948		Drilled with 12-1/4" bits to 3930' and cored with 7-5/8" core barrels to 3948. Directional survey of hole made by Alexander Anderson.
11-25	4000		Cored ahead to 4000'. Ran Schlumberger survey. Reamed out core hole with 12-1/4" bit to 3986'.
11-25	4000		Cemented 8-5/8" 36# grade "C" 8-thread rounded seamless casing at 3986 with 400 sacks Victor oil well cement.
12-1	4030		Found top of cement at 3956'. Cleaned out cement and plugs to 3991. Water shut off test on 8-5/8" casing at 3986 witnessed and approved by Stolz of Division of Oil & Gas. Cored to 4030'.
12-3	4076		Cored to 4076. Ran Schlumberger survey. Landed 116' of 8-5/8" 26# Grade "C" 10-thread casing at 4075', including 89' of 120 mesh (16-2-6) Kobe perforated on bottom. Bailed fluid to 1200' when oil broke in.
12-5	4076		Bailed hole clean. Landed 3" upset tubing at 3710'. Ran rods and installed pumping unit. Well on pump 6:00 P.M. 12-5-37.

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR UNION OIL COMPANY OF CALIFORNIA FIELD LONG BEACH

Well No. OIL OPERATORS 3, Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

Signed Herry E. Winter

Date Dec. 31, 1937

Title District Engineer
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

PRODUCTION TEST DATA:

1937	Gross	Net	Grav.	Cut	Status	Remarks
12-5	215	159	23.5	26.0	P 11	
12-6	373	367	23.5	1.5	P 24	
12-7	310	307	23.5	1.1	P 24	
12-8	304	301	23.5	1.0	P 24	
12-9	308	305	23.5	1.0	P 24	
12-10	312	309	23.5	1.0	P 24	
12-11	311	308	23.5	1.0	P 24	
12-12	311	307	23.5	1.2	P 24	
12-13	284	282	23.5	0.7	P 24	
12-14	310	308	23.5	0.8	P 24	
12-15	296	293	23.5	1.0	P 24	
12-16	317	314	23.5	1.0	P 24	
12-17	307	304	23.5	1.0	P 24	
12-18	305	302	23.5	1.0	P 24	
12-19	302	299	23.5	1.0	P 24	
12-20	286	283	23.5	1.0	P 22	Changed gas line
12-21	282	279	23.5	1.0	P 24	
12-22	291	287	23.5	1.5	P 24	
12-23	295	291	23.5	1.5	P 24	
12-24	276	271	23.5	1.7	P 21	Working on gas engine
12-25	307	301	23.5	1.8	P 24	
12-26	246	242	23.5	1.5	P 20	Starting gas engine
12-27	263	279	23.5	1.4	P 24	

CORE RECORD

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE #3 WELL LOCATION 53.88 ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
11-23-37	1	7-5/8 Sol1	3930	3948	17.8			10.8		Firm, medium to coarse gray sand. Inclusion of brown shale 0.3 from bottom. Dip - 13°. Hard sandy brown shale with fracture of 45°. Firm, medium to coarse gray sand with streaks of soft fine gray sand. Dip - 13°.		
						0.3		6.7				
						0.3		17.5				
11-25-37	2	7-5/8 Sol1	3948	3966	12.7					NOTE- Driller reported shell at 3951. 2.3' lost at top of core. Firm medium gray sand 0.5 Hard, calcareous shale shell. Firm to soft medium gray sand. Hard dark brown shale. Highly fractured in top 1.6'. Fracture of 60° 1.0' from bottom. Dip 15°-24°. Soft fine brown oil sand. Good odor. Hard brown sandy shale. Firm, soft fine brown oil sand. Fair odor and amber cut. Hard dark brown shale. Firm, soft fine brown oil sand. Fair odor and amber cut.		
						6.1		2.8				
						0.1						
						0.2		0.9				
						1.1		0.4				
						7.4	1.4	3.4	0.5			
11-25-37	3	7-5/8 Sol1	3966	3984	13.1	0.1				Hard, dark brown shale. Firm, soft fine brown oil sand. Poor odor and light amber cut. Hard dark brown shale Soft fine brown oil sand mixed with mud. Poor odor and light amber cut. Hard, dark brown shale with fractures of 25°. Top 0.4 highly fractured and contains streaks of fine brown oil sand. Streak of fine brown oil sand 0.4 from bottom. Firm fine brown oil sand. Fair odor and amber cut. Hard dark brown shale. Dip - 14°. Hard broken brown shale. Badly mixed with mud. Firm soft fine brown oil sand. Fair odor and amber cut. Hard broken brown shale with streaks of fine brown oil sand. Badly broken and mixed with mud. Hard dark brown shale.		
						0.3						
						0.1		0.5				
						3.3						
						0.4						
						2.5						
						1.8						
						0.2						
						3.1						
						0.8						
						11.7	1.4			NOTE-Driller reported shell at 3981.		

CORE RECORD

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

#3

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP.	ANGLE OF HOLE
11-25-37	4	7-5/8 Sol1	3984	4000	12.2	3.9	8.3			Hard compact massive dark brown to black shale. Slightly sandy in spots. Firm soft medium to coarse dark brown oil sand. Strong odor and dark amber cut. Sand looks good. Streak of brown shale at bottom.		
12-1-37	5	7-5/8 Sol1	4000	4015	10.1	3.9	8.3			Firm soft fine brown oil sand. Good odor.		
						0.4				Hard dark brown fractured shale. Dip = 22°.		
						1.1				Firm soft coarse brown oil sand. Good odor.		
						4.8				Firm soft fine brown oil sand. Good odor and dark amber cut.		
						0.2				Hard fractured brown shale. Dip = 16° with slickensides along dip.		
						2.8				Firm soft fine brown oil sand. Good odor and dark amber cut. Streak of brown bentonitic shale 0.3 from top.		
12-1-37	6	7-5/8 Sol1	4015	4030	6.7	0.6	9.5			Firm soft fine brown oil sand, poorly sorted top 1.0. Good odor and dark amber cut.		
						0.3				Firm, fine brown oil sand laminated with grayish-brown bentonitic shale.		
						0.4				Hard grayish-brown bentonitic shale. Change from oil sand and shale above is very gradational.		
						2.6				Firm, soft fine brown oil sand. Good odor and dark amber cut.		
						0.1				Hard brown shale.		
						1.0				Firm soft fine brown oil sand.		
						0.5	6.2					
12-2-37	7	7-5/8 Sol1	4030	4045	7.6	0.2	5.6			Hard brown shale. Dip = 17°		
						0.1				Firm soft fine to medium brown oil sand. Good odor and dark amber cut.		
						1.7				Hard grayish-brown bentonitic shale.		
						0.3	7.3			Firm soft medium brown oil sand. Good odor and dark amber cut.		

CORE RECORD

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

#3

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
12-2-37	8	7-5/8 Soli	4045	4060	13.2			0.1		1.8 of mud and cavings with streak of fine gray sand 0.5 from top. Soft fine brown oil sand mixed with mud.		
						4.4	0.5			Hard brown shale with streaks and partings of fine brown oil sand.		
							0.4			Firm soft fine brown oil sand.		
						0.5	0.1			Hard brown shale with streaks of fine brown oil sand.		
							0.4			Firm soft fine brown oil sand.		
						0.2				Hard brown shale.		
							1.0			Firm soft fine brown oil sand.		
										Good odor and dark amber cut.		
						0.5				Hard brown shale.		
							0.9			Soft fine brown oil sand. Good odor		
						0.3				Hard brown shale. Fracture of 27°		
							0.3			Soft fine brown oil sand.		
						0.7				Hard brown shale. Dip - 19°		
							1.8			Soft fine brown oil sand. Good odor and dark amber cut.		
						0.2				Hard brown shale.		
							0.2			Soft fine brown oil sand mixed with mud.		
						0.2				Hard brown shale.		
						7.0	6.1	0.1				
12-2-37	9	7-5/8 Soli	4060	4076	12.3		2.5			Firm, soft fine brown oil sand. Good odor and dark amber cut.		
						1.6				Hard dark brown shale.		
									0.5	Hard slightly calcareous shale shell.		
						0.3				Hard silty dark brown shale.		
							0.2			Firm soft fine brown oil sand.		
						1.2	0.1			Hard silty dark brown shale, with streaks of fine brown oil sand.		
							0.3			Soft loose fine brown oil sand.		
						0.6	0.1			Hard dark brown silty shale with streaks of fine brown oil sand.		
							0.2			Firm soft fine brown oil sand.		
						0.7				Hard dark brown sandy shale with partings of fine brown oil sand. Poor dips 20°-26°.		
							0.6			Firm fine dark brown argillaceous oil sand.		
						0.2				Hard dark brown sandy shale.		
							1.9			Firm soft fine brown oil sand. Good odor and dark amber cut.		
						0.7				Hard dark brown sandy shale. Good dip of 28° with slickensides along dip		
										0.1 zone of black gouge between shale and sand above.		
							0.6			Soft loose fine brown oil sand.		
						5.3	6.5	0.5				
					TOTAL	DEPTH	-	4076				

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach

Well No. Oil Operators 3 Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

Henry E. Winter

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
0	125	125			Surface clay
125	140	15			Shale and boulders
140	350	210			Sand and shale
350	725	375			Hard sand
725	1058	333			Shale and sand
1058	2419	1361			Sand and streaks of shale
2419	2720	301			Sand and shale
2720	2768	48			Hard sand
2768	2888	120			Hard sand and streaks of shale
2888	2890	2			Shell
2890	2937	47			Hard sand and streaks of shale
2937	3592	655			Shale and streaks of sand
3592	3623	31			Hard sand
3623	3630	7			Shale and streaks of sand
3630	3653	23			Hard sand
3653	3765	112			Shale and streaks of sand
3765	3770	5			Hard sand
3770	3853	83			Sand and streaks of shale
3853	3854	1			Shell
3854	3864	10			Shale
3864	3866	2			Shell
3866	4076	210			Sand and streaks of shale (see core record)

STATE CALIFORNIA
DEPARTMENT (NATURAL RESOURCES)

No. 7646

DIVISION OF OIL AND GAS

LOS ANGELES

Calif. 12/9 1937

Name of Operator Union Oil Co of Calif

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 4S

R. 13W - Long Beach, B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work see log - oil operators 3 - 12/2/37

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By E. H. Huggins

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

No. T 1-33469

Los Angeles, Calif. December 8, 1937.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your well No. "OIL OPERATORS" 3, Sec. 13, T. 4 S., R. 13 W., S. B. B. & M.,

Long Beach Field, in Los Angeles County, was tested for

shut-off of water on December 1, 1937. Mr. F. C. Stolz
Time and date

designated by the supervisor, was present as prescribed in Section 19, Chapter 718, Statutes 1915, as amended, and there were also present R. Rampton, Engineer, and

J. Kewish, Toolpusher.

Location of water tested above 3986' and normal fluid level not determined

Depth and manner { 3986 ft. of 8-5/8 in. 36 lb. } casing was { 11-26-37 } in shale
of water shut-off: { ft. of in. lb. } { shaded } Formation

at 3986 ft. with 400 sacks Victor oil well cement by casing method.

Water string was landed in 12 1/2" rotary hole.
Size, rotary or cable tool

Casing record of well 13-3/8" cem. 765'; 8-5/8" as above.

Reported total depth of hole 4000 ft. Hole bridged from xxx ft. to xxx ft. Hole cleaned out to 3991 ft. for this test.

At time of test depth of hole measured See below ft. and bailer brought up sample of xxxxx

At See below oil bailed to xxx ft., drilling fluid { bailed } to xxx ft.
Time and date { swabbed }

At " " top of oil found at xxx ft., top of fluid found at xxx ft.
Time and date

THE INSPECTOR ARRIVED AT THE WELL AT 8:30 A. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. No casing test was made.
2. 28' of set cement was drilled out of the 8-5/8" casing (equivalent to 8 sacks).
3. The Johnston tester was run into the hole on 4" drill pipe.
4. The wall packer was set at 3989'.
5. The tester valve was opened at 9:12 a. m. and remained open for 30 minutes. During this interval there was a medium blow of air for 6 minutes, a strong to medium blow of gas for 24 minutes.

THE INSPECTOR NOTED THE FOLLOWING:

1. When the drill pipe was removed 2700' of oil was found in the drill pipe above the tester, equivalent to 38 bbl.
2. The fluid sample taken from the bottom of the drill pipe tasted fresh.
3. The recording pressure bomb chart showed that the tester valve was open for 30 minutes.

The test was completed at 11:50 a. m.

THE SHUT-OFF IS APPROVED.

cc- H. E. Winter
Long Beach
FGS:OH

R. D. BUSH

State Oil and Gas Supervisor

By

E. Aguilar Deputy

629 South Hill Street
Los Angeles, California
November 24, 1937.

Union Oil Company of California,
Santa Fe Springs, Calif.

Gentlemen:

Attention Mr. Henry E. Winter

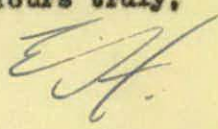
This will acknowledge receipt of and thank you
for your letter dated November 22, 1937, giving the correct
elevation and location of your well No. "Oil Operators" 3,
Sec. 13, T. 4 S., R. 13 W., S. B. B. & M., Long Beach field,
as follows:

Elevation: 53.88' U. S. G. S.

Location: 982 feet N.W. 'ly along the center
line of the Pacific Electric Railway Right of
Way from the center line of Bixby Road
projected and thence 271 ft. southwesterly
at right angles.

Our records have been corrected accordingly.

Yours truly,



B:EMS

CC - Mr. R. D. Bush (2)
Long Beach

Deputy Supervisor.

Corrections Made as Follows		By Whom
Weekly Summaries		
121		
Elev. and Loc. Cards		
Production Reports		
Well Records	Folders	
	Reports	
Peg Models		
Graphs		
Photo. Maps		

20 CFB

Book
CLB
11/24/37

Union Oil Company of California

PRODUCERS AND REFINERS OF
CRUDE OIL, FUEL OIL, ROAD OIL AND ASPHALT,
UNION GASOLINE, KEROSENE AND DISTILLATE,
'RED LINE' LUBRICATING OILS AND GREASES.

DIVISION OF OIL AND GAS
RECEIVED
NOV 24 1937
LOS ANGELES, CALIFORNIA

Santa Fe Springs, Calif. Nov. 22, 1937

Mr. E. Huguenin, Deputy Supv.,
Division of Oil & Gas,
Los Angeles, Calif.

Dear Sir:

The elevation of the Union Oil
Company well "Oil Operators #3" at Long Beach
(Sec. 13-4-13) is 53.88 U.S.G.S.

The corrected location is as
follows:

982 ft. N-W'ly along the center line
of the Pacific Electric Railway Right of
Way from the center line of Bixby Road
projected and thence 271 ft. Southwesterly
at right angles.

Our records have been corrected
accordingly.

Very truly yours,

Henry E. Winter
District Engineer.

HEW:S

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-33407

Los Angeles, Calif. November 29, 1937.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 3 Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.,

Long Beach Field, in Los Angeles County, were witnessed by

E. R. Murray-Aaron, representative of the supervisor,

on November 9, 1937. There was also present R. Rampton, Engineer, and

J. Kewish, Drilling Foreman.

Casing Record 13-3/8" cas. 765'; T.D. 765'. Junk XXXXX

The operations were performed for the purpose of demonstrating that the known surface waters are adequately protected,

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 8:45 A. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. A 17" rotary hole was drilled from the surface to 765'.
2. 770' of 13-3/8" - 45.97 lb. casing was run into the hole to 765'.

THE INSPECTOR NOTED THE FOLLOWING:

1. The 13-3/8" casing was cemented at the reported depth of 765' with 350 sacks of Victor High Early cement.
2. The final pressure was 500 lb.

The operations were completed at 9:30 a. m.

THE CEMENTING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT THE KNOWN SURFACE WATERS ARE ADEQUATELY PROTECTED.

cc- H. E. Winter
Long Beach
ERNA:OH

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Sullivan Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-31535

Los Angeles, Calif. November 4, 1937

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to drill Well No. "OIL OPERATORS" 3,
Section 13, T4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
dated Oct. 28, 1937, received Oct. 29, 1937, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"The well is 355 feet W'ly along the center line of San Antonio from the center line of Del Mar Ave. and thence 925' N'ly at right angles. 53.88 ft.
The elevation of the derrick floor above sea level will be determined later - approx. 55 ft.
We estimate that the first productive oil or gas sand should be encountered at a depth of about 4000 feet, more or less."

PROPOSAL:

"We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing	Weight	New or Second Hand	Depth	Landed or Cemented
13-3/8"	46	New	700'	Cmt'd.
8-5/8"	36	New	4000	Cmt'd.
6-5/8"	Perforated liner	New	4100'	Landed

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

- (a) Mud fluid of not less than 70 lb. per cubic foot shall be used in the drilling of the well and the column of mud fluid shall be maintained at all times to the surface, particularly while pulling the drill pipe.
(b) Adequate blow-out prevention equipment shall be provided and ready for operation at all times.
- Any hole to be sidetracked at any time during the drilling of this well shall be completely filled with cement.
- The formations to be left back of the 8-5/8" casing shall be mudded by open circulation until the loss is not more than 5 bbl. per hr.
- THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
(a) The cementing of the 13-3/8" surface casing.
(b) Final mudding operations before cementing the 8-5/8" casing.
(c) A test of the effectiveness of the 8-5/8" shut-off.

*982 feet N.W. 'ly along the center line of the Pacific Electric Railway
Right of Way from the center line of Bixby Road projected and thence
271 feet southwesterly at right angles. (Correction letter 11-24-37)

cc- H. E. Winter
Long Beach
WJC:OH

R. D. BUSH

State Oil and Gas Supervisor

By

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well
This notice must be given before drilling begins

RECEIVED
OCT 29 1937
LOS ANGELES, CALIFORNIA

037-06496

General Exploration Co.

Santa Fe Springs Cal. Oct. 28, 1937

Mr. E. HUGUENIN

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

Pi-31535

DEAR SIR:

"Oil Operators" 3

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of drilling well No. Oil Operators #3, Sec. 13, T. 4-S,

R. 13-W, S.B. B. & M., Long Beach Oil Field Los Angeles County.

Lease consists of 932 feet N.W. 1/4 along the center line of the Pacific Electric Railway Right of Way from the center line of Bixby Road projected and thence 271 feet south-

The well is 355 W 1/4 along the center line of San Antonio from the center line of Del Mar feet N 68 E, and thence 925' N 1/4 at right

(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the derrick floor above sea level is Will be determined later - feet. approx. 55 ft.

westerly at right angles. (Correction letter 11-24-37)

We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing, Inches	Weight, Lb. Per Foot	New or Second Hand	Depth	Landed or Cemented
13-3/8"	46	New	700'	Cmtd.
8-5/8"	36	New	4000	Cmtd.
6-5/8"	Perforated liner	New	4100'	Landed

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing.

We estimate that the first productive oil or gas sand should be encountered at a depth of about 4000 feet, more or less.

Respectfully yours

Address Santa Fe Springs, Calif.

UNION OIL COMPANY OF CALIFORNIA

(Name of Company or Operator)

Telephone number Whittier 42687

By Henry E. Winters
District Engineer.

Reference to file of data

ADDRESS NOTICE TO DEPUTY STATE OIL AND GAS SUPERVISOR IN CHARGE OF DISTRICT WHERE WELL IS LOCATED

Wildcat Well
Topog. #54
SAR

Wildcat
Book
68B
10/29/37

SCHLUMBERGER ELECTRICAL LOGS

ELECTRICAL
1-267
COMPANY DATE Dec. 2,
sh LOCATION

COMPANY UNION OIL COMPANY DATE Dec. 2, 1937

WELL (GEN.) C.R.G. Properties, Ltd

Casing shoe
Bottom

Max. depth _____ ell

Max. footage measured (prop. running) _____ footage incurred by run _____

Footage missed _____ ft. Total time incurred by run _____

NATURE	nature?	VISCOSITY	PC	LEVEL

NATURE	natural	VISCOSITY	20	LEVEL	
DENSITY	72	RESISTIVITY	0.3		

DENSITY : 72 RESISTIVITY : 0.2

DIAMETER OF HOLE	Type of Material	Type of Tool	Card	Time	
				Min	Sec
1/8"	Aluminum	Drill	1	15	00
1/4"	Aluminum	Drill	1	30	00
3/8"	Aluminum	Drill	1	45	00
1/2"	Aluminum	Drill	1	1	00
5/8"	Aluminum	Drill	1	1	15
3/4"	Aluminum	Drill	1	1	30
7/8"	Aluminum	Drill	1	1	45
1"	Aluminum	Drill	1	2	00
1 1/8"	Aluminum	Drill	1	2	15
1 1/4"	Aluminum	Drill	1	2	30
1 3/8"	Aluminum	Drill	1	2	45
1 1/2"	Aluminum	Drill	1	3	00
1 5/8"	Aluminum	Drill	1	3	15
1 3/4"	Aluminum	Drill	1	3	30
1 7/8"	Aluminum	Drill	1	3	45
2"	Aluminum	Drill	1	4	00
2 1/8"	Aluminum	Drill	1	4	15
2 1/4"	Aluminum	Drill	1	4	30
2 3/8"	Aluminum	Drill	1	4	45
2 1/2"	Aluminum	Drill	1	5	00
2 5/8"	Aluminum	Drill	1	5	15
2 3/4"	Aluminum	Drill	1	5	30
2 7/8"	Aluminum	Drill	1	5	45
3"	Aluminum	Drill	1	6	00
3 1/8"	Aluminum	Drill	1	6	15
3 1/4"	Aluminum	Drill	1	6	30
3 3/8"	Aluminum	Drill	1	6	45
3 1/2"	Aluminum	Drill	1	7	00
3 5/8"	Aluminum	Drill	1	7	15
3 3/4"	Aluminum	Drill	1	7	30
3 7/8"	Aluminum	Drill	1	7	45
4"	Aluminum	Drill	1	8	00
4 1/8"	Aluminum	Drill	1	8	15
4 1/4"	Aluminum	Drill	1	8	30
4 3/8"	Aluminum	Drill	1	8	45
4 1/2"	Aluminum	Drill	1	9	00
4 5/8"	Aluminum	Drill	1	9	15
4 3/4"	Aluminum	Drill	1	9	30
4 7/8"	Aluminum	Drill	1	9	45
5"	Aluminum	Drill	1	10	00
5 1/8"	Aluminum	Drill	1	10	15
5 1/4"	Aluminum	Drill	1	10	30
5 3/8"	Aluminum	Drill	1	10	45
5 1/2"	Aluminum	Drill	1	11	00
5 5/8"	Aluminum	Drill	1	11	15
5 3/4"	Aluminum	Drill	1	11	30
5 7/8"	Aluminum	Drill	1	11	45
6"	Aluminum	Drill	1	12	00
6 1/8"	Aluminum	Drill	1	12	15
6 1/4"	Aluminum	Drill	1	12	30
6 3/8"	Aluminum	Drill	1	12	45
6 1/2"	Aluminum	Drill	1	13	00
6 5/8"	Aluminum	Drill	1	13	15
6 3/4"	Aluminum	Drill	1	13	30
6 7/8"	Aluminum	Drill	1	13	45
7"	Aluminum	Drill	1	14	00
7 1/8"	Aluminum	Drill	1	14	15
7 1/4"	Aluminum	Drill	1	14	30
7 3/8"	Aluminum	Drill	1	14	45
7 1/2"	Aluminum	Drill	1	15	00
7 5/8"	Aluminum	Drill	1	15	15
7 3/4"	Aluminum	Drill	1	15	30
7 7/8"	Aluminum	Drill	1	15	45
8"	Aluminum	Drill	1	16	00
8 1/8"	Aluminum	Drill	1	16	15
8 1/4"	Aluminum	Drill	1	16	30
8 3/8"	Aluminum	Drill	1	16	45
8 1/2"	Aluminum	Drill	1	17	00
8 5/8"	Aluminum	Drill	1	17	15
8 3/4"	Aluminum	Drill	1	17	30
8 7/8"	Aluminum	Drill	1	17	45
9"	Aluminum	Drill			

REMARKS

REMARKS
 101121.50"

October 1941

ELECTRICAL

ELECTR

3 ELEVATION

3 ELEVATION

Max. footage measured (p or S. P) _____ ft. Mileage incurred _____
Footage missed _____ ⁴ ft. Total time incurred _____

MUD CHARACTERISTICS	
NAME	VISCOSITY
1	100
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
19	100
20	100
21	100
22	100
23	100
24	100
25	100
26	100
27	100
28	100
29	100
30	100
31	100
32	100
33	100
34	100
35	100
36	100
37	100
38	100
39	100
40	100
41	100
42	100
43	100
44	100
45	100
46	100
47	100
48	100
49	100
50	100
51	100
52	100
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75	100
76	100
77	100
78	100
79	100
80	100
81	100
82	100
83	100
84	100
85	100
86	100
87	100
88	100
89	100
90	100
91	100
92	100
93	100
94	100
95	100
96	100
97	100
98	100
99	100
100	100

DENSITY : 75 RESISTIVITY

DIAMETER OF HOLE
12" to 3930

LEVEL :

REMARKS

REMARKS
Device: 20"

Review:

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

2. The second step is to gather relevant information and data. This can involve research, consultation with experts, or collecting data from various sources.

3. The third step is to analyze the information and data collected. This involves identifying patterns, trends, and relationships that can help in understanding the problem.

4. The fourth step is to develop a solution or answer. This involves applying the knowledge and skills gained from the analysis to the problem at hand.

5. The fifth step is to evaluate the solution or answer. This involves checking the results against the original problem and requirements to ensure that the solution is valid and effective.

6. The sixth step is to communicate the solution or answer. This involves presenting the findings in a clear and concise manner, using appropriate language and format.

7. The seventh step is to reflect on the process. This involves thinking about what was learned from the experience and how it can be applied to future problems.

8. The eighth step is to document the process. This involves creating a record of the steps taken and the results achieved, which can be used for future reference.

9. The ninth step is to review the process. This involves looking back at the entire process to see if there were any areas for improvement or if the solution was the best possible one.

10. The tenth step is to conclude the process. This involves summarizing the key findings and the overall outcome of the process.

[illegible][illegible]

Mr. Hagestead - Mr. Wini

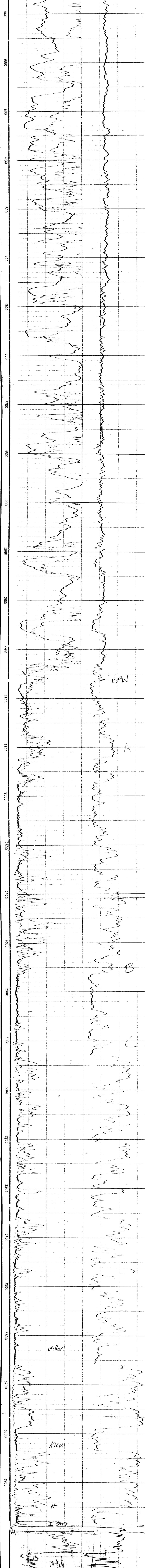
WITNESSED BY _____
OBSERVERS : R. FORSTER

	OBSERVERS :	NO
		DATE : 09-08-2016

30

Year	Percentage of Population Aged 15 and Over Who are Illiterate
1950	55
1955	65
1960	70
1965	75
1970	80
1975	85
1980	85

Year	United States (%)	Japan (%)	Germany (%)
1950	7	7	15
1960	8	8	16
1970	9	10	17
1980	10	13	17
1990	11	16	17
2000	12	18	17
2010	13	19	17
2020	14	20	17
2030	14.5	20	17.5
2040	15	20	18
2050	15	20	18



SCHLUMBERGER

WELL SURVEYING CORPORATION

C.R.G. Properties, Ltd. CALIFORNIA

COMPANY: UNION

FIELD: RECEIVED Long B

AUG 28 1941

WELL: 011 Op

LOS ANGELES, CALIFORNIA

SEC: T R

COUNTY: Los Angeles

STATE: California

ELEV.: 53.88 U.S.G.S.

Sec. 13-4S-13W.

"Oil Operators" 3

(037-06496)

Beach #3
Los Angeles
7-1429
7-1443

UNION OIL CO.

RUN	D-1	D-2	3	4	5
Date	8-21-41	8-25-41			
Csg. shoe	3986'	3986'			
Total depth	5200'	5450'			
Depth rchd.	5198'	5450'			
Ft. Meas.	1212'	252'			
Mud: Nat.	Chemical	Chemical			
Dens	73.8	74			
Visc.	43	41			
Res.	2.6@ 86°F	3.1@ 91°F			
Max. Temp.	166°F	144°F			
Meas. from	table	table			
Tension	1700#				
Rig. Time	1 1/2 hrs.	1-3/4 hr.			
Mileage	10	10			
Observer	V.T. Fant	V.T. Fant			
Witnessed by:	Winter	Winter			

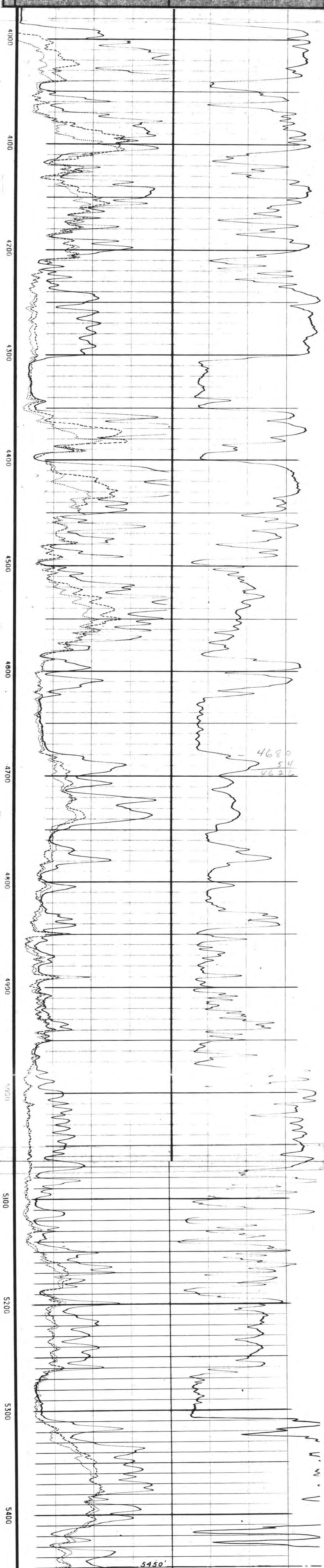
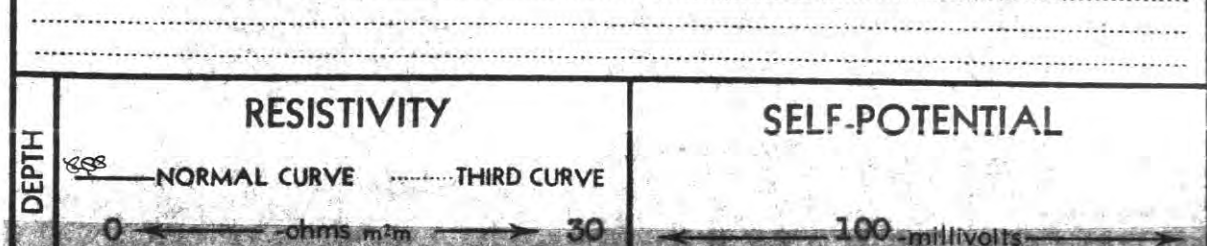
DIAMETER OF HOLE

7-5/8"

REMARKS

Device: Standard 3rd curve -----

Long device 3rd curve



Union Oil Co.
Oil Operators #3
Long Beach



Temperature Survey

WELL: 8-3

COMPANY: CRG Properties, LTD.
FIELD: Long Beach
COUNTY: Los Angeles STATE: CA

WELL DATA

DATE: 4-26-2005
TYPE LOG: TEMP
TOTAL DEPTH:
GDA: 2,943'
TOP LOGGED INTERVAL: 0'
FLUID LEVEL: 775'
PKR DEPTH:
PLUG BACK DEPTH:
RECORDED BY: John Reece

CASING: 8.625"
TUBING:
TOP PERFORATION: 4,091'
BOFW: 2,100'
LINE SPEED: 30 ft/min
DF above Mat: 0'
API: 03706496

EQUIPMENT AND TEST DATA

PRESSURE TBG psi:
PRESSURE CSG psi: 43
WELL STATUS: Static
TRUCK No: 1
TOOL SIZE: 1 1/4"

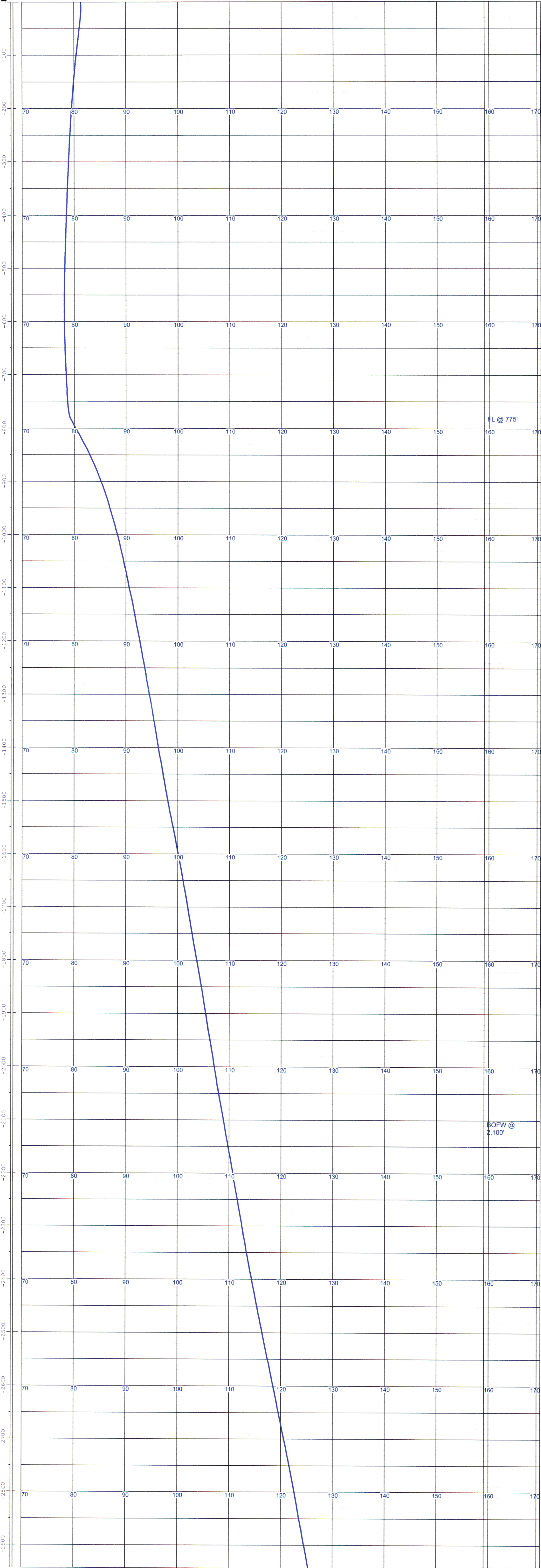
TOOL DATA

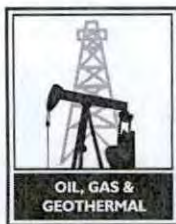
CALIBRATED TEMP RANGE:-0.9-253.9deg F
ACCURACY RESOLUTION: 0.25% FS
RESOLUTION: 0.002% FS
COMMENTS: MAX BH TEMP 126.44 F

DEPTH, ft

Temperature

Temperature
(Fahrenheit)





DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 100 Cypress, CA 90630-4731
Phone:(714) 816-6847 Fax:(714) 816-6853
REPORT OF WELL ABANDONMENT

Cypress, California
March 27, 2017

Mr. Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your report of abandonment of well "**Nwlbu**" 8-3, A.P.I. No. **037-06496**, Section **13**, T. **04S**, R. **13W**, **SB** B.&M., **Long Beach** field, **Los Angeles** County, dated **12/15/2013**, received **1/8/2014**, has been examined in conjunction with records filed in this office. We have determined that the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records. The plugging and abandonment of the well is **approved**.

The determination of this well plugging and abandonment is based on the following information, consistent with California Public Resources Code (PRC), and the California Code of Regulations (CCR):

1. Surface plugging completed on 12/2/2013.
2. Site inspection made and approved on 12/19/2013.

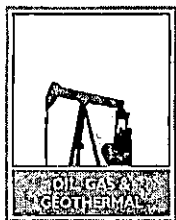
Kenneth A. Harris Jr.

State Oil and Gas Supervisor

By *Daniel J. Dudak*
For Daniel J. Dudak, *District Deputy*

EPM:epm

cc: Long Beach Dept. of Gas & Oil



DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630-4731
Phone: (714) 816-6847 Fax: (714) 816-6853
REPORT OF WELL ABANDONMENT

Cypress, California
May 21, 2014

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your report of abandonment of well "Nwlbu" 8-3, A.P.I. No. 037-06496, Section 13, T. 04S, R. 13W, SB B.&M., Long Beach field, Los Angeles County, dated 12/12/2013, received 2/4/2014, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

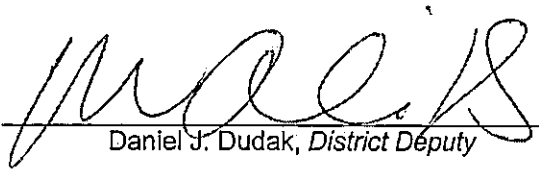
NOTE: 1. Surface plugging completed on 12/2/2013.
2. Site inspection made and approved on 12/19/2013.

EM:kj

cc:Update

Pat Perez
Acting State Oil and Gas Supervisor

By


Daniel J. Dudak, District Deputy

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

SITE RESTORATION MEMO

Operator: C.R.G Properties, Ltd Well "NWLB" 8-3
API No. 037-06496 Sec. 13 T. 045 R. 13W SB B&M
Field Long Beach County Los Angeles Date 3/21/2014
Mr. / Ms. Abdulmageed (AB) Abdulrahman representative of the supervisor, was present 1000 to 1200
There were also present: Mick Beyer of AllenCo Contact Number: (310) 505-9787
Email:

Surface location description:

The property at 712 W. Baker Street (Baker Street / Golden Street.) The property can be accessed near intersection of Magnolia Ave. and Wardlow Rd.

Date of Abandonment/Re-Abandonment: 11/01/2013

	Approved	Not Approved	Corrected	Comments
Well Accessibility	☒	☐	☐	Not obstruction as of the date of the inspection
Oil & Gas Field Equipment Removed	☒	☐	☐	
Oil Field Related Waste/Refuse Removed	☒	☐	☐	
Well Cellar Removed	☒	☐	☐	
Operation Sumps Removed	☐	☐	☐	Not Applicable
Visible Surface Oil Contamination Removed	☒	☐	☐	
Oil Field Related Power Pole(s) Removed	☒	☐	☐	
Tank(s) Removed	☒	☐	☐	
Surface Pipeline(s) Removed	☒	☐	☐	
Pad(s) Removed	☒	☐	☐	

Photos Taken For the Final Inspection:

See the following photos.

Number of deficiencies: N/A Deficiency Letter Date: _____ Deficiency Letter Number: _____

Photos attached to well file: Yes ☒ No ☐

The inspection as witnessed and reported is approved. Yes ☒ No ☐

By: Abdulmageed G. Abdulrahman

Date: 6/17/2014

All equipment, pipeline, casing or junk were removed from the site. All liquid wastes were removed and properly disposed. Excavations filled with earth and compacted properly to prevent settling.

Additional description of site restoration: _____

Description: _____







DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST – RECORDS RECEIVED AND WELL STATUS

Company:	C.R.G. Properties, LTD	Well: NWLBU 8-3
API#:	037-06496	Sec. 13, T. 4S, R.13W. S. B. B. & M.
County:	Los Angeles	Field: Long Beach

RECORDS RECEIVED	DATE	STATUS	
Well Summary (Form OG100)	2/4/2014 (2)	Active	☐ Drilling ☐
History (Form OG103)		Abandoned	☒ Idle ☐
Core Record (Form OG101)		Reabandoned	☐ Other ☐
Directional Survey			
Sidewall Samples			
Date final records received.			
Electric Logs:			
Other:			
		WELL TYPE	
		Oil	☒ Waterflood ☐
		Gas	☐ Water Disposal ☐
		Water Source	☐ Cyclic Steam ☐
		Observation	☐ Steam Flood ☐
		Exploratory	☐ Fire Flood ☐
		Dry Hole	☐ Other ☐
		EFFECTIVE DATE: 12/2/13	
		REMARKS: Abandoned	

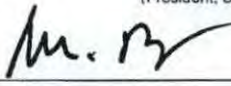
ENGINEERS CHECK LIST	CLERICAL CHECK LIST
☒ Summary, History & Core Record (Dupl.)	Location change
☐ Electric Log	Elevation change
☒ Operator's Name	Form OGD121
☒ Signature	Form OGD150b (Release of Bond)
☒ Well Designation	Duplicate logs to archives
☐ Location	Notice of Records Due
☐ Elevation	EDP MC 5-15-14
☒ Notices	District Date Base
☒ "T" Reports	Final Letter (OG159) 5-21-2014
☒ Casing Record	Update Center MC 5-15-14
☒ Plugs	
☐ Directional Survey	
☐ Production/Injection (FAP Codes: 412-03-00)	
☐ E Well on Prod., enter EDP	
☒ Surface Inspection Required 12/19/13 OK	FIELD CHECK LIST
☐ Surface inspection Waived (Island)	Date Surface Inspection Completed: 12/19/13 BFD
☐ Well site restoration deferred (common cellar)	Other:
☒ Final Letter Required AB: ☒ REAB: ☐	
☐ Other:	

RECORDS NOT APPROVED	RECORDS APPROVED
(Reason:)	(Signature) E.M. Andrews
	RELEASE BOND
	Date Eligible
	(Use date last needed records received.)
	MAP AND MAP BOOK

u

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
HISTORY OF OIL OR GAS WELL

Operator C.R.G. Properties, LTD Field Long Beach County Los Angeles
Well "NWLBW" 8-3 Sec. 13 T. 04S R. 13w sbB.&M.
A.P.I. No. 037-06496 Name Mick Beyer Title Operations Manager
(Person submitting report) (President, Secretary, or Agent)
Date 12-12-13
(Month, day, year)

Signature 

Address 2109 Gundry Ave. Signal Hill, Ca. 90755

Telephone Number 562 989-6100

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

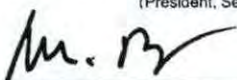
11-08-13	M.I.R.U. - Installed and tested BOPE-Witnessed by C. Cullum w/DOGGR - Secured Well
11-11-13	R.I.H. 5 1/2" Scraper tagged dn. @ 5842' = 104' above clean out depth - Circ. with water w/returns of oily water and gas - P.O.H. Witnessed by M. Okafor & Z. Amilhussin w/ DOGGR - Secured well
11-12-13	R.I.H. W/Tbg. cleaned out scale and fine sand from 5842' to 5900' unable to work deeper - Secured well
11-13-13	W/Tail at 5900' mixed and pumped 247 cu/ft (217 sxs) class G cement - P.O.H. - Witness by Secured well
11-14-13	R.I.H. Tagged cement plug at 4067' - Pumped 15 bbls. 73# mud - R.I.H. W/ 5/8" Scraper to 3043' - TLH - P.O.H. - R.I.H. - Tbg. - Witnessed by Secured well
11-15-13	W/tbg. Tail at 3875' Mixed and pumped 212 cu/ft. (186 sxs) class G cement - P.O.H. Witnessed by T. Tyler w/DOGGR - Secured well.
11-18-13	R.I.H. Tagged cement plug at 2773' - Tested casing at 1000 psi - Good - Pumped 25 bbls. of 73# mud P.O.H. - R.I.H. Shot perforations from 2450' to 2440' - P.O.H. - R.I.H. w/ Tbg. Tail at 2450' Established break down at 1.5 bbls/min. @ 800 psi. Mixed and Pumped 203 cu/ft (178 sxs) class G cement Squeezed away 107 cu/ft. (94 sxs) Witnessed by W/ DOGGR - secured well
11-19-13	R.I.H. Tagged cement 2171' - Pumped 120 bbls, 73# mud - P.O.H. - Shot perforation from 210' to 200' - R.I.H. W/tbg. Tail at 210' mixed and pumped 209 cu/ft. (183 sxs) class G cement - cement returns from 8 5/8" & 13 3/8" csg. - cement to surface inside and outside - P.O.H. - Witnessed by T. Tyler - R.D.M.O.
11-25-13	Dug down around well and cut casing 5' below surface - Found cement low inside 10' and outside 20' - Secured well
12-03-13	Topped off casing's with 36 c.f. (31 sxs) class G cement - E. Tabor w/DOGGR witnessed
12-04-13	Surface tag and welding of I.D. Plate Witnessed by P. Kaufman - Backfilled well location - Job complete.



F

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
HISTORY OF OIL OR GAS WELL

Operator C.R.G. Properties, LTD Field Long Beach County Los Angeles
Well "NWLBU" 8-3 Sec. 13 T. 04S R. 13w sbB.&M.
A.P.I. No. 037-06496 Name Mick Beyer Title Operations Manager
(Person submitting report) (President, Secretary, or Agent)
Date 12-12-13
(Month, day, year)

Signature 

Address 2109 Gundry Ave. Signal Hill, Ca. 90755 Telephone Number 562 989-6100

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

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CEMENTING/PLUGGING MEMO

T 114-0060 KMA 12/3/13

Operator CRG Properties Well No. "Nwlbu" 8-3
 API No. 037-06496 Sec. 13 T. 04S R. 13W S.B. B&M
 Field Long Beach County Los Angeles On 12-4-13
 Mr. / Ms. J. Collender representative of the supervisor, was present from 1115 to 1130

There were also present Mr. Tim Parker (Allenco)

Casing record of well: 13 3/8" cem 765', cp 200'; 8 5/8" cem 3986', drilled thru 3139', cp 2,440'; 5 1/2" Id 3043'-5964', cp 4393',
 4488-5827'. TD (present hole) 6540'. Plugged w/ cem 6540'-5964', 5878'-4067', 3875'-2773', 2450'-2171', 210'-6.5'.

The operations were performed for the purpose of Abandonment

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ are approved.

Hole size: 17 " fr. 0 ' to 765 ' , 12 1/4 " to 3139 ' & 7 5/8 " to 6540 ' ,

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
8 5/8"	36#	0'	3,986'	11/18/13	tbg@ 2,450'	200 cf	2174'	2171'	114 cf	700 psi	2,440'-2,450'
13 3/8"	46#	0'	210'	11/19/13	tbg@200'	103 cf	0	29.5'	26 cf	--	200'-210'

Casing/tubing recovered: " Shot/cut at ' , ' , ' Pulled fr. ' ;
 " Shot/cut at ' , ' , ' Pulled fr. ' .

Junk (in hole):

Hole fluid (bailed to) at ' . Witnessed by

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
83/25	11/14/13	25	4067'		3,875'	C. L. Cullum
73/ 26	11/18/13	27	2,773'		2,318'	Z. Amilhussin
73/40	11/19/13	120	2,018'		1,971'	T. Tyler

Note (12) Class II 3M; 11/08/13; C. Welty

C/O 5900' w/ 20,000# @ 1200 11/12/13 PK

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
11-13-13	247 cf	Tbg 5878'	0900	WM Flores	4067'	4000#	11/14/13 0715	C.L.Cullum
11-15-13	212 cf	Tbg@ 3875'	0830-1045	T. Tyler	2,773'	2,000#	11/18/13 0715	Z. Amilhussin
11-18-13	210 cf	Tbg@ 2450'	1300	Z. Amilhussin	2171'	2,000#	11/19/13 0715	T. Tyler
11-19-13	73sx/84 cf	Tbg@200'	1425-1500	T. Tyler	29.5	---	----	----
12/2/13	36 cf	Top 29.5	1030	E. Tabor	6.5'	visual	12/4/13 1115	J. Collender

* 6 stages with tbg raised from 5878' through 4313'

Andrews, Kathleen@DOC

From: Moser, Ellen@DOC
Sent: Tuesday, November 12, 2013 12:53 PM
To: Andrews, Kathleen@DOC
Subject: FW: Well Abandonment Nwlbu 8-3

Mick wants a variance to start cementing at 5900'.

From: Mick Beyer [<mailto:mbeyer@allencoca.com>]
Sent: Tuesday, November 12, 2013 12:34 PM
To: Moser, Ellen@DOC
Subject: Well Abandonment Nwlbu 8-3

Ellen,

We tagged fill at 5842' cleaned out with water down to 5900' (we had no solid returns to surface, it seemed like cement steamers) we are hitting hard at this depth. Well history is showing cement plug at 5964' it seems we are hitting it at 5900'. We would like approval to start are cement plug at 5900'

Note; On well 9-4 we tagged hard at 9125' when clean out depth was 9151' DOGGR Allowed us to cement at 9125'
Note; On well 9-5 we tagged fill at 9410' cleaned out hard to 9420' when clean out depth was at 9454' DOGGR Allowed us to cement at 9420'

Sincerely,

Mick

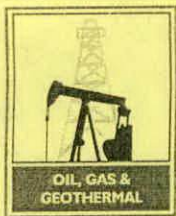
Mick Beyer, Operations Manager
mbeyer@allencoca.com

AllenCo

2109 Gundry Avenue
Signal Hill, CA 90755
Phone: 562-989-6100
FAX: 562-989-6104
Cell: 310-505-9787

www.allenco-oilwellservice.com

Telecon w/M. Beyer - gravel-sized chunks of cement had been brought up for some time with well fluids when circulating. Then brought up chunks of cement. Fill at 5900' is hard, push on w/20K#. Okayed to cement. Allenco will use 8 5/8" scraper to liner top, then circulate before placing mud. KMA 11/12/13.
11/14/13 Okayed change in program to place one plug from 3875' to 2800'. KMA



REPORT ON OPERATIONS

Mr Mark Pender
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Cypress, California
January 24, 2014

Your operations at well "Nwlbu" 8-3, A.P.I. No. 037-06496, Sec. 13, T. 04S, R. 13W, SB B.&M., Long Beach field, in Los Angeles County, were witnessed on 11/8/2013, by Jack Collender, a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION: **APPROVED**

NOTE: The required Class 112M blowout prevention equipment was inspected and approved on 12/4/2013.

DEFICIENCIES NOTED AND CORRECTED: NONE

KMA:dt

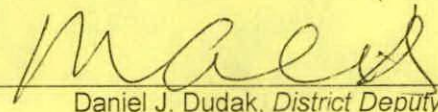
cc: Update

Tim Kustic

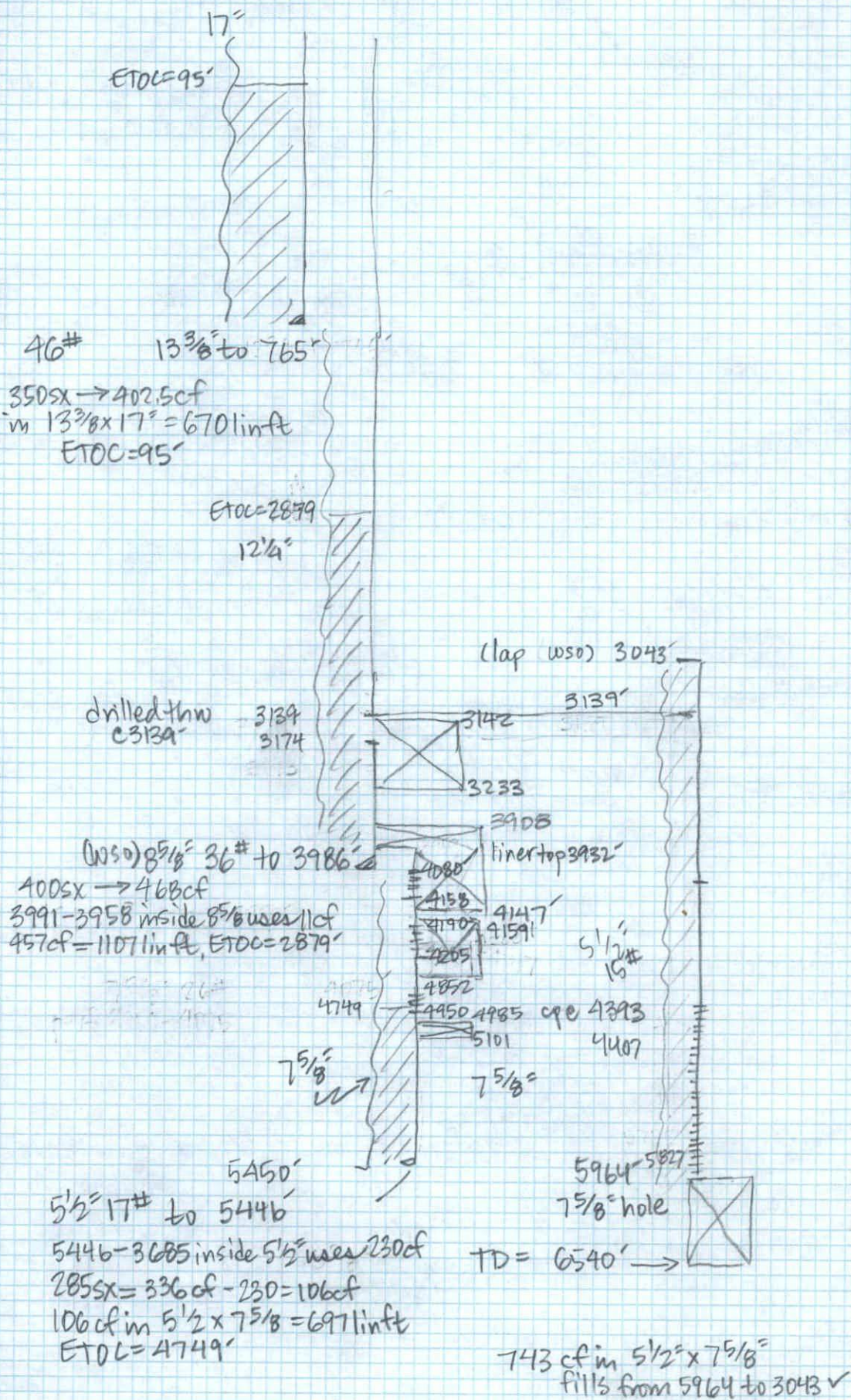
State Oil and Gas Supervisor

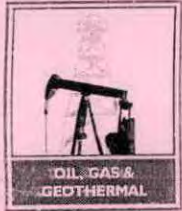
By:

For:


Daniel J. Dudak, District Deputy

037-06496
"NWibu" 8-3





NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630 - 4731

PERMIT TO CONDUCT WELL OPERATIONS

CRITICAL WELL

No. P 113-0596

Old	New
412	412
FIELD CODE	
03	03
AREA CODE	
00	--
POOL CODE	

Cypress, California
July 15, 2013

Mr Mark Pender, Agent
C.R.G. Properties, LTD (C0250)
149 S. Barrington Ave. #804
Los Angeles, CA 90049

Your proposal to **Abandon** well "**Nwlbu**" **8-3**, A.P.I. No. **037-06496**, Section **13**, T. **04S**, R. **13W**, **SB B. & M.**, **Long Beach** field, **Northwest Extension** area, **Brown** pool, **Los Angeles** County, dated **7/10/2013**, received **7/10/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
 - a. Class **II3M**, with hydraulic controls, during **abandonment** operations.
 - b. A **3M lubricator** for **wireline** operations.
2. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
3. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of **72** lbs/cu.ft and a minimum gel shear strength of **25** lbs./100 sq. ft.
5. Prior to shooting any perforations for braidenhead squeezes, a pressure test of the **8-5/8"** casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
6. The well location shall be surveyed prior to burying the well, and the survey shall be filed with this office. Latitude and longitude shall be in decimal degrees, to six decimal places, in NAD83.
7. All casing must be removed from between 5' and 10' below ground level.
8. Well site restoration shall be completed within 60 days following the completion of plugging operations.
9. No program changes are made without prior Division approval.
10. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.
 - b. Witness the clean-out depth at **6540'**.

(Continued on page 2)

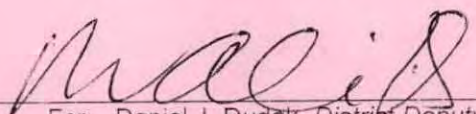
No Bond Required

cc: Update
EDP
AllenCo.
DOGGR - Dist. 1 (Cypress)

Engineer Ellen Plaza Moser
Office (714) 816-6847

EPM/epm

Tim Kustic
State Oil and Gas Supervisor

By 
For: Daniel J. Dudak, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

- c. Witness the placing, location and hardness of the cement plug from **6540'** to **4193'**.
- d. Witness the mudding operations.
- e. Witness the placing, location and hardness of the cement plug from **3875'** to **3675'**.
- f. Witness the placing, location and hardness of the cement plug from **3043'** to **2800'**.
- g. Witness a pressure test of the **8-5/8"** casing.
- h. Witness the cement squeeze through the **perforations** at **2440'** through a retainer or packer (if casing integrity is not demonstrated).
- i. Witness the placing, location and hardness of the cement plug from **2450'** to **2190'**.
- j. Witness the cement squeeze through the **perforations** at **210'** through a retainer or packer (if casing integrity is not demonstrated).
- k. Witness the placing, location and hardness of the cement plug from **210'** to **surface'**, including all annular spaces.
- l. Inspect the restored well site.

NOTE:

- 1. Upon completion of the proposed work, a History of Oil or Gas Well (form OG103) shall be submitted to this office.
- 2. The well abandonment history (History of Oil or Gas Well - form OG103), must include a description of the removal or abandonment of the well flowline and any associated piping.
- 3. Hydrogen sulfide gas (H₂S) is known to be present in this area, adequate safety precautions shall be taken prior to and during well operations.
- 4. The operator shall isolate the following zones:
 - a. **Base of the Freshwater Sand at 2260'.**
 - b. **Top of the Upper Gas Zone at 2400'.**
 - c. **Top of the Wilbur Zone at 3000'.**
 - d. **Top of the Alamitos Zone at 3875'.**
 - e. **Top of the Brown Zone at 4680'.**

Failure to achieve adequate zonal isolation may have negative impacts on current and future operations. In addition, failure to achieve adequate zonal isolation will also be noted on the Report of Operations (OG 109).



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

#113-0596

DG
EM

FOR DIVISION USE ONLY		
Bond	Forms	
	OGD114	OGD121
BB	7/13/13	7/10/13

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ well "Nwibu" 8-3, API No. 037-06496

(Check one)
Sec. 13, T. 4s, R. 13w, S.B. B.&M., Long Beach Field, Los Angeles County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

See Attachment

The total depth is: 6540 feet. The effective depth is: 5964 feet.

Present completion zone(s): see attachment (Name) Present zone pressure: N/A psi.

Oil or gas shows: see attachment (Name and depth) feet. Depth to base of fresh water: 2260 feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): see attachment (Depth of Interval) feet.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes ☒ No ☐

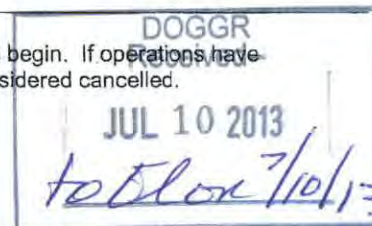
The proposed work is as follows: (A complete program is preferred and may be attached.)

See Attachment.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator C.R.G. Properties, Ltd			
Address 2109 GUNDRY AVE.		City/State SIGNAL HILL	Zip Code 90755
Name of Person Filing Notice MICK BEYER	Telephone Number: 562 989-6100	Signature <i>M. B.</i>	Date 07-10-13
Individual to contact for technical questions: MICK BEYER	Telephone Number: 310 505-9787	E-Mail Address: Mbeyer@allencoca.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.



CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

1967 Post-Window

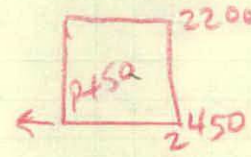
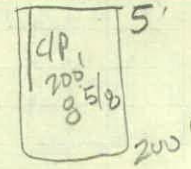
13 7/8 4597#
cem 765'
350SX
17" hole

ETOC 84'

350SX x 1.18 =
413 cf
4" incsg .8812²²₁₅ 3524
409 cf annulus

765'

.6006
csq/hole
.8872 cf/14



- BFW 2260'
- UHZ 2400'

8 5/8" 36#
cem 3986
400 SX / 472 cf
ETOC: 2843'
12 1/4 BIT

ETOC 2865

472 cf - 9.3 = 463 cf

cem in csq 28 cf
= 9 cf

463 cf / .427 = 1121'

drilled
thru 3139'

3986' WSO

mud



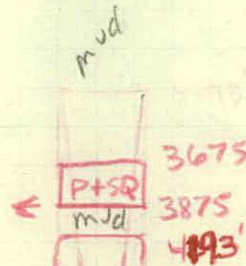
- LW 3000'

15.5#

5 1/2" / 7 5/8" hole
cem 5964 - 3003
743 cf

post 4393 WSO

4393' CP



- TA 3875'

Perfs

- TB 4630'

5827'

5964'

TD

6540'



CP

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

C.R.G. Properties, Ltd. Well "Nwlbu" 8-3 (037-06496), Sec.13, Twn. 4S, Rge. 13W, S.B. B&M, Long Beach Oil Field.

According to Division records, the present condition of the well is as follows:

1. **Location:** West of Pacific Place just North of the 710 freeway on ramp. See map Exhibit A - Attachment II
2. **Accessibility:**
3. **Status:** Idle deserted
4. **Total Depth:** 6540' **Effective Depth:** 5964' **Elevation of Kelly Bushing (KB) above sea level:** 60'
5. **Casing:** 13-3/8" 45.97# casing cemented 765' with estimated top cement behind pipe at 84' +/-; 8-5/8" 36# casing cemented 3986' with estimated top of cement behind pipe at 2865' +/-, drilled thru 3139'; 5-1/2" 15.5# Id 3043' - 5964', cp 4393, estimated top of cement behind pipe at 3043, perforated from 4458' to 5827'.
6. **Tubing:** Unknown **Rods:** Unknown
7. **Base of Fresh Water (BFW):** 2260'
8. **Producing Zone(s):** Alamitos
9. **Hole Fluid:** Unknown
10. **Junk:** Unknown
11. **Plugs:** 6540' to 5964'.
12. **Comments:** Top of Brown zone 4680', top of Alamitos zone 3875', top of Wilbur zone 3000', and top of Upper Gas zone 2400'.

The following operations are necessary to plug and abandon the well:

1. A Notice of Intention to Abandon (form OG 108) is to be filed with this Division at least 10 days prior to commencing work. Work is not to begin until a Permit to Conduct Well Operations (Form OG 111) has been issued. All well operations are to be witnessed by a representative of this Division as directed in the Permit to Conduct Well Operations.
2. The abandonment contractor will review job safety programs (JSP) with all crewmembers prior to work startup and/or if conditions change. Monitor well for any leaking gas. Position gas monitors and ventilation fans, if warranted before moving in any other equipment or personnel.
3. Adequate blowout prevention equipment, as defined in Division's publication No. M07, shall be installed and maintained in operating condition at all times. The minimum requirements are:
 - a. A 3M rod Reagan or equivalent BOPE for pulling rods and pump operations.
 - b. A Class II 3M, with hydraulic controls, during abandonment operations.
 - c. A 3M lubricator for wire line operations.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs/cu ft and a minimum gel shear strength of 25 lbs. /100 sq. ft. All cement plugs are to have a minimum compressive strength of 1000 psi and maximum liquid permeability of 0.1 md. All depths noted are from the KB.
5. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

6. Kill well. Install and function test rod Reagan or equivalent BOPE. Pull out of the hole with rods and pump.
7. Remove rod Reagan. Install and function test Class II3M BOPE (function test BOPE each day thereafter).
8. Pull out all production tubing.
9. Use appropriate combination tools to clean out to 6540'.
10. Run in scraper. Scrape the 8 5/8" and the 5 1/2" casings.
11. Run in hole with tubing (if tag high, clean out fill to 6540').
12. The well shall be plugged with cement from 6540' to 4193'.
13. The well shall be plugged with cement from 3875' to 3675'.
14. The well shall be plugged with cement from 3043' to 2800'.
15. Prior to shooting any perforations for braidenhead squeezès, a pressure test of the casing shall be made to ensure casing integrity. If casing integrity is not demonstrated, a retainer or packer is required for squeeze operations.
16. The 8-5/8" casing shall be perforated from 2440 to 2450'. Get an injection rate or a breakdown.
17. Sufficient cement shall be squeezed into the perforations to fill to 2190' outside the 8-5/8" casing.
18. The well shall be plugged with cement from 2450' to 2190'.
19. The 8-5/8" casing shall be perforated from 210 to 200'. Get an injection rate or a breakdown.
20. Sufficient cement shall be squeezed into the perforations to fill to surface.
21. The well shall be plugged with cement from 210' to surface.
22. The 13-3/8" X 17" annulus shall be plug with cement from 84' to surface.
23. All casing must be removed from between 5' and 10' below ground level.
24. A steel plate, at least as thick as the outer well casing and bearing the last five digits of the API number, shall be tack welded around the top of the outer casing.
25. Cellar, production pads and pipelines shall be removed and the resulting excavations filled with earth and compacted properly to prevent settling.
26. Remaining buried pipelines that cannot be removed shall be purged with clean water. Abandon line by pumping approved cement slurry mixture, weld steel cap on both ends of the line and bury.

EXHIBIT A – Attachment II (continued)
WELL CONDITIONS AND ABANDONMENT SPECIFICATIONS

27. All equipment, casing, or junk that requires removal to implement restoration to lawful conditions shall be removed and properly disposed of in accordance with environmental laws and in accordance with instructions from the Division of Oil and Gas. All liquid wastes shall be removed and properly disposed.
28. A well History (Form OG 103) shall be filed in duplicate with the Division within 60 days of completing the work and must include a description of the removal or abandonment of the well flow line and any associated piping.

1 DEPARTMENT OF CONSERVATION
2 Division of Oil, Gas, and Geothermal Resources
3 5816 Corporate Avenue, Suite 200
4 Cypress, California 90630
5 Telephone (714) 816-6847
6 Facsimile (714) 816-6853
7

8 **STATE OF CALIFORNIA**
9 **NATURAL RESOURCES AGENCY**
10 **DEPARTMENT OF CONSERVATION**
11 **DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**
12

13 **REVISED**

14 **FORMAL ORDER TO:**
15 **PLUG AND ABANDON WELLS &**
16 **RESTORE LEASE CONDITIONS**
17

18 **NO. 1032**

19 **Dated: October 18, 2012**

20 **Operator: C.R.G. Properties, Ltd. (C0250)**
21

22 **BY**

23 **Tim Kustic**

24 **STATE OIL AND GAS SUPERVISOR**
25
26
27

RESOURCES AGENCY OF CALIFORNIA/
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF PROPERTY AND WELL TRANSFER

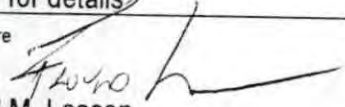
Field or County Long Beach	District District 1 (Cypress, California)
Former owner Pacific Energy Res.	Date July 26, 2000

Well Name	API Number	Section Township Range
"Nwlbu" 5-2	037-00397	Sec. 13-4S-13W
"Nwlbu" 5-3	037-09796	Sec. 13-4S-13W
"Nwlbu" 5-4	037-09797	Sec. 13-4S-13W
"Nwlbu" 8-3	037-06496	Sec. 13-4S-13W
"Nwlbu" 8-4	037-06415	Sec. 13-4S-13W
"Nwlbu" 8-7	037-22512	Sec. 13-4S-13W
"Nwlbu" 9-2	037-13525	Sec. 13-4S-13W
"Nwlbu" 9-3	037-09791	Sec. 13-4S-13W
"Nwlbu" 9-4	037-00392	Sec. 13-4S-13W
"Nwlbu" 9-5	037-00142	Sec. 13-4S-13W
"Nwlbu" 9-6	037-00393	Sec. 13-4S-13W

Description of the land upon which the well (s) is (are) located.

See above

Date of transfer May 9, 2000	New owner C.R.G. Properties, Ltd. C0250	Type of organization Corp./Ltd.
	Address: 15332 Antioch Street, Suite 338 Pacific Palisades, CA 90272	Telephone (310) 808-9071
Reported by	OG34A received 6/2/2000 signed by both parties	
Confirmed by	Same as above	
New operator new status PA	Designation of Agent Mark Pender	
Old operator new status PA	Remarks See operator file for C.R.G. Properties, Ltd. for details	

OPERATOR STATUS ABBREVIATIONS	Deputy Supervisor	Signature
<i>PA - Producing Active</i>	R. K. Baker	 Floyd M. Leeson Operations Engineer
<i>NPA- No potential, Active</i>		
<i>PI- Potential Inactive</i>	FORM AND RECORD CHECK LIST	
<i>NPI- No potential, Inactive</i>	Form or Record	Initials
<i>Ab-Abandoned or No More Wells</i>	Date	Form or Record
cc: Update; Envir Dsk; File Conservation Committee Harold W. Bertholf, Inc. LA County Assessor Sacramento EDP Cypress EDP	Form OGD121	Map and Book
	Operator Card	Notice cancellations
	Well Records	Bond Status
	Log Records	EDP
	Production Repts	Data Base

WELL TRANSFER NOTICE

EFFEC MAY 9, 1994, PETRO RESOURCES, INC.

TRANS LONG BEACH NWLBU WELLS

TO PACIFIC ENERGY ~~CORP~~ *Resources*

SEE OGD156 DATED 5-13-94

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

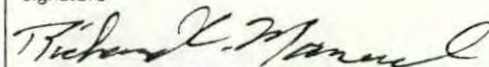
REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1
Former owner Sun Exploration & Production Co.		Date June 15, 1983
Name and location of well(s) Sec. 13-4S-13W S.B.B.&M.		
NWLBU 5-1 (037-09795)	NWLBU 8-1 (037-09792)	NWLBU 9-3 (037-09791)
NWLBU 5-2 (037-00397)	NWLBU 8-2 (037-09793)	NWLBU 9-4 (037-00392)
NWLBU 5-3 (037-09796)	NWLBU 8-3 (037-06496)	NWLBU 9-5 (037-00142)
NWLBU 5-4 (037-09797)	NWLBU 8-4 (037-06415)	NWLBU 9-6 (037-00393)
NWLBU 6-1 (037-09788)	NWLBU 8-7 (037-22512)	
NWLBU 6-2 (037-09789)	NWLBU 9-2 (037-13525)	
Description of the land upon which the well(s) is (are) located		
Date of transfer, sale, assignment, conveyance, or exchange May 1, 1983	New owner Petro Resources, Inc. Address 4200 Easton Drive, Suite 16 Bakersfield, CA 94309	Type of organization Corp. Telephone No. 805/323-4118
Reported by Letter from Sun Exploration & Production Co. dated 5-16-83.		
Confirmed by Letter from Petro Resources, Inc., dated 5-18-83.		
New operator new status (status abbreviation) PA	Request designation of agent Joe D. Rose, same address.	
Old operator new status (status abbreviation) PA	Remarks	

Deputy Supervisor

V. F. Gaede

Signature



OPERATOR STATUS ABBREVIATIONS

PA - Producing Active

NPA - No Potential, Active

PI - Potential Inactive

NPI - No Potential, Inactive

Ab - Abandoned or No More Wells

FORM AND RECORD CHECK LIST

	Form or record	Initials	Date	Form or record	Initials	Date
	Form OGD121	CP	7-7-83	Map and book	137	7/12/83
	Form OGD140	NONE		Notice to be cancelled		
	New well cards	CP	7-7-83	Bond status		
	Well records	CP	7-7-83	EDP files		
	Electric logs	CP	7-7-83	Update		
	Production reports			Conservation Committee		
				L. A. Assessors		

Name change from Sun Oil Co. to SUN EXPLORATION & PRODUCTION CO.

1-1-82, Form 156 dated 1-21-82. See ownership file.

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Long Beach, California

Oct. 4, 1979

Mr. L. B. Carroll, Jr., Agent
Sun Oil Co.
23928 Lyons Ave.
Newhall, CA 91321

DEAR SIR:

Your request dated March 19, 1979, relative to change in designation of well(s) in Sec. 13, T. 4S, R. 13W, S.B.B. & M., Long Beach field, Los Angeles County, District No. 1, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

“* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor.”

the proposed change in designation is hereby authorized as follows:

Old Designation	API	New Designation
"Oil Operators" 1	037-09792 (See)	NWLBU 8-1
" " 2	037-09793	NWLBU 8-2
" " 3	037-06496	NWLBU 8-3
" " 4	037-06415	NWLBU 8-4
"Pool" 1	037-09795	NWLBU 5-1
" " 2	037-00397	NWLBU 5-2
" " 3	037-09796	NWLBU 5-3
" " 4	037-09797	NWLBU 5-4
"Amebco" 1	037-09788	NWLBU 6-1
" " 2	037-09789	NWLBU 6-2
"Flood Control" 2	037-13525	NWLBU 9-2
" " 3	037-09791	NWLBU 9-3
" " 4	037-00392	NWLBU 9-4
" " 5	037-00142	NWLBU 9-5
" " 6	037-00393	NWLBU 9-6

*map 137
+ Book
pme 11/2/79*

RWS:sc

M. G. Mefferd
JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

cc: Update Center
EDP
Conservation Committee

By Richard W. Stahl
Acting Deputy Supervisor
R. A. Ybarra

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1	
Former owner General Exploration Co.		Date February 15, 1979	
Name and location of well(s)			
<u>Sec. 11-4S-13W</u>		<u>Sec. 13-4S-13W</u>	
"Dominguez" 2-10 (037-11859)		"Flood Control" 6 (037-00393)	
<u>Sec. 13-4S-13W</u>		"Oil Operators" 1 (037-09792)	
"Amebco" 1 (037-09788)		"Oil Operators" 2 (037-09793)	
"Amebco" 2 (037-09789)		"Oil Operators" 3 (037-06496)	
"Flood Control" 2 (037-13525)		"Oil Operators" 4 (037-06415)	
"Flood Control" 3 (037-09791)		"Pool" 1 (037-09795)	
"Flood Control" 4 (037-00392)		"Pool" 2 (037-00397)	
"Flood Control" 5 (037-00142)		"Pool" 3 (037-09796)	
		"Pool" 4 (037-09797)	
Description of the land upon which the well(s) is (are) located			
		<u>Sec. 14-4S-13W</u>	
		"Dominguez" 1 (037-11858)	
Date of transfer, sale, assignment, conveyance, or exchange Dec. 1, 1978	New owner Sun Oil Company	Type of organization Corporation	
	Address 23928 Lyons Avenue Newhall, CA 91321	Telephone No.	
Reported by Former operator			
Confirmed by New operator			
New operator new status (status abbreviation) PA	Request designation of agent		
Old operator new status (status abbreviation) AB	Remarks		
Deputy Supervisor <i>for</i> M. B. Albright		Signature <i>Eleanor R. Kier</i>	
OPERATOR STATUS ABBREVIATIONS		FORM AND RECORD CHECK LIST	
PA - Producing Active	Form or record	Initials	Date
NPA - No Potential, Active	Form OGD121		
PI - Potential Inactive	Form OGD148		
NPI - No Potential, Inactive	New well logs		
Ab - Abandoned or No More Wells	Well records		
	Electric logs		
	Production reports		
	Map and book		
	Notice to be considered		
	Bond status		
	EDP files		
	ara		
	cc: EDP Update		
	Conservation Committee		
	Update Center		

DIVISION OF OIL AND GAS

CHECK T - RECORDS RECEIVED AND WELL STATUS

Company GENERAL EXPLORATION Co Well No. "OIL OPERATORS" 3
API No. 037-06496 Sec. 13, T. 4S, R. 13W, SB B.&M.
County LA Field LONG BEACH

RECORDS RECEIVED

DATE

Well Summary (Form OGI00) _____
✓ History (Form OGI03) 5-27-77 _____
Core Record (Form OGI01) _____
Directional Survey _____
Sidewall Samples _____
Other _____
Date final records received _____
Electric logs: _____

STATUS

STATUS

Producing - Oil X Water Disposal _____
Idle - Oil _____ Water Flood _____
Abandoned - Oil _____ Steam Flood _____
Drilling - Idle _____ Fire Flood _____
Abandoned - Dry Hole _____ Air Injection _____
Producing - Gas _____ Gas Injection _____
Idle - Gas _____ CO₂ Injection _____
Abandoned - Gas _____ LPG Injection _____
Gas-Open to Oil Zone _____ Observation _____
Water Flood Source _____
DATE 4-24-77 _____
RECOMPLETED _____
REMARKS _____

ENGINEER'S CHECK LIST

1. Summary, History, & Core record (dupl.) ✓
2. Electric Log _____
3. Operator's Name _____
4. Signature _____
5. Well Designation _____
6. Location _____
7. Elevation _____
8. Notices _____
9. "T" Reports _____
10. Casing Record _____
11. Plugs _____
12. Surface Inspection _____
13. Production _____
14. E Well on Prod. Dir. Sur. _____

CLERICAL CHECK LIST

1. Location change (F-OGD165) _____
2. Elevation change (F-OGD165) _____
3. Form OGD121 _____
4. Form OGI59 (Final Letter) _____
5. Form OGD150b (Release of Bond) _____
6. Duplicate logs to archives _____
7. Notice of Records due (F-OGD170) _____

sent to SB Blueprint 6-3-77

RECORDS NOT APPROVED

Reason: _____

RECORDS APPROVED BB

RELEASE BOND PC

Date Eligible 5-27-77
(Use date last needed records were received.)

MAP AND MAP BOOK NC

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR GENERAL EXPLORATION CO. FIELD NORTH LONG BEACH
~~037-06496~~ (037-06496)
 Well No. OIL OPERATORS 3, Sec. 13, T. 4S, R. 13W, SB B. & M.
 Date 5-25, 19 77 Signed Robert Grams
4021 N. PACIFIC LONG BEACH Title 213-636-1629
 (Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

4-16-77 Rigged up well servicing unit. Pulled rods & tubing. Ran bailer and tagged fill at 5870'. Installed BOP.

4-17-77 Ran Baker scraper and brushes in hole. Tested tubing to 5000psi. Rigged up Dresser Atlas. Ran correlation log and perforated 2 hpf as follows: 4740'-4765'; 4775' - 4707'; 4792' - 4810'.

4-18-77 Ran scraper through new perfs. Ran wash tool with retrievomatic packer to top of liner.

4-19-77 Washed perfs with acid mixture
 A. 10 gal/ft 15% BJ One shot (15% solvent)
 B. 15 gal/ft 12-3 4CL-HF One shot (10% Solvent)
 C. 10 gal/ft #1 Diesel Fuel containing 10% EGMBE Mutual Solvent

4-20-77 Continued washing perfs. Surged perfs with wash tool, pulled out, ran in hole with suction washer.

4-21-77 Suction washed perfs. Ran bailer, tagged fill at 5849'.

4-22-77 Ran tubing and rods. Put well on production.

4-23-77 Well did not pump up.

4-24-77 Pulled rods and pump. Barrel unscrewed, ran new pump. Put well back on production.

32.2 BOPD 25.7 BWPD 45.1% CUT

RECEIVED
 MAY 25 1977
 DIVISION OF OIL AND GAS
 RESOURCES AGENCY OF CALIFORNIA

DIV. OF OIL AND GAS
LONG BEACH, CA.

EX-102-102 A-11 JUN 73 CEN

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR GENERAL EXPLORATION CO. FIELD NORTH LONG BEACHWell No. OIL OPERATORS #3, Sec. 13, T. 4S, R. 13W, SB B. & M.Date 5-25, 19 77 Signed Robert Graves4021 N. PACIFIC 213-636-1629 Title Production Superintendent
(Address) LONG BEACH (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

OIL OPERATORS 3 CONTINUED

Well condition at completion of work:

TD 1st hole; 5450': TD 2nd hole 5833' (redrilled from 3142' through 8 5/8" casing window 3139' - 3174'); TD 3rd hole, 6540' (redrilled from cem plug 5094')

Casing Detail:

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap wse), CP 4393'

Perfs 4394-95 wsd

4407'-4444'; 4458' - 4498'; 4563' - 4616';

4740'-4765'; 4775' - 4787'; 4792' - 4810';

5397'-5430'; 5692' - 5707'; 5711' - 5728';

5733'-5752'; 5794' - 5808'; 5812' - 5827'

RECEIVED
DIVISION OF OIL AND GAS

MAY 25 1977

RECEIVED

MAY 27 12 45 PM '77

DIV. OF OIL AND GAS
LONG BEACH, CA.

FOIA b 7 - D

[illegible]

OSBURN
GEORGE EXHIBITION CO.
LTD
NORTH LONG BEACH

HISTOIRY OF OH OF C22 M611

DIVISION OF OIL AND GAS

SIEGAL, M. DOBRYCHLE

0103-108 2-25 2015 101 0-25

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 176-432

Mr. R. L. Graves, Agent
GENERAL EXPLORATION CO.
4021 N. Pacific Place
Long Beach, CA 90806

Long Beach, Calif.
June 17, 1976

DEAR SIR:

Your proposal to rework Well No. (037-06496)
Section 13, T. 4S, R. 13W, S.B. B. & M., Long Beach Field, "Oil Operators" 3
dated 4/15/76, received 6/15/76, has been examined in conjunction with records filed in this office. Los Angeles County,

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment with a minimum 2000 psi working pressure shall be installed and maintained in operating condition during all stages of perforating.
2. Well records, under Sec. 3215 of the Public Resources Code, are received 60 days after recompletion of the well.

RFC:dr

Blanket Bond

5/25/77
Graves/Crowder
Work done history
will be filed

HAROLD W. BERTHOLF,
~~X~~JOHN E. MATTHEWS, Jr., State Oil and Gas Supervisor

By M.B. Albright, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Long Beach, California May 4, 1976

Mr. Robert L. Graves, Agent
General Exploration Co.
4021 N. Pacific Place
Long Beach, CA 90806

Gentlemen:

Dear Sir:

I have received your ~~notices dated~~ notices dated April 15, 1976, of

notice of intention to rework Well Nos "Pool" 2 & "Oil Operators" 3

Sec. 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach field.

Your notices to rework cannot be considered until a surety bond in the sum of \$5,000.00 has been filed for each well. Operations should not be started until the approval of this Division has been received. This will ensure that you have notice of our requirements.

The notices are being returned to you for signatures. Please return these signed notices with the bond.

HAROLD W. BERTHOLF

~~JOHN C. MATHIAS~~
State Oil and Gas Supervisor

ag
Enc.

(2nd request 6-3-76)

OG113 (12-73-GSR1-1M)

By *M. B. Auvriat*
Deputy Supervisor

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Long Beach Calif. April 15 1976

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of deepening, redrilling, plugging or altering casing at Well No. "Oil Operators" 3
(Cross out unnecessary words)Lease, Sec. 13, T. 4S, R. 13 W, SB B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. - 6540' PBTD - 5964'

2. Complete casing record, including plugs:

13 3/8" c 765'8 5/8" c 3139' (Milled for Window)5 1/2" , 15.5# , J-55 c 3043' to 5964'Perfs 4394-95 (WSO); 4407-4444'; 4458-4498'; 4562-4616';
5397'-5430'; 5692'-5707'; 5711'-5728'; 5733'-5752';
5794'-5808'; 5812-5827'3. Last produced. 4/15/76 9.2 14.9 —
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)

The proposed work is as follows:

1. Pull Pump, Rods, & Tubing
2. Perforate following intervals
4740'-4765'
4775'-4787'
4792'-4810'

3. Return well to production

Rework

FOR		FOR	
114	121	114	121
✓	✓	✓	✓

B

4021 PACIFIC PLACE
(Address) Long Beach
213-424-8025
(Telephone No.)

General Exploration Co
(Name of Operator)

By

Robert James

RECEIVED
JUN 15 12 10 PM '76
DIV. OF OIL AND GAS
LONG BEACH, CA.

RECEIVED
MAY 4 11 21 AM '76
DIV. OF OIL AND GAS
LONG BEACH, CA.

Notice of intention to Dechen' Regain' Ring or After Owing in 2 on

DIVISION OF OIL AND GAS

WORK PERFORMED:

Drill _____ Redrill _____ Deepen _____
 Plug _____ Alter casing ☒
 Water flood _____ Water disposal _____
 Abandon _____
 Other _____

STATUS:

(Date)

Producing _____
 Recomp. prod. ☒ 6-13-68
 Water flood _____
 Water disposal _____
 Abandoned _____
 Other _____
 MAP AND BOOK NC

RECORDS FILED & DATE:

Clerk LawRECORDS & REQUIREMENTS CHECKED: Eng. Wen

Summary (dup.) _____

Log & Core (dup.) _____

History (dup.) 7/3/68 ☒

E-log _____

Radio log _____

D. Survey _____

Other _____

(Check records for signature
 and correct name of operator
 or well, S.T.R. and field.)

Location _____ Notice states _____

Elevation _____ Notice states _____

Production Reports _____

(If production reports not
 received, make notation and
 inform Sr. Steno. when rec'd.)

If stimulation or disposal well:

Form 121 _____ Folder _____

Form 19-A

Surface inspection _____

Data needed now

Clerk:

Request records _____

F 170

Correct records _____

F 165

(Specify)

165A

CARDS NCBOND: No bond required

Hold _____ Reason _____

Release _____ Date elig. _____

F 150b

End premium year _____

Release requested _____ (Check)

Bond superseded _____ (one)

Well abandoned _____

FINAL LETTER _____

F 159

and

FILE CLEARED _____

F 121

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Co. of Calif. FIELD Long BeachWell No. "Oil Operators" 3, Sec. 13, T. 4S, R. 13W, SB B. & M.Date July 2, 1968

Signed

R. S. Ballantyne, Jr.

417 S. Hill Street

R. S. Ballantyne, Jr.

Los Angeles, 90013

628-2156

Title Vice President

(Address)

(Telephone Number)

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date
1968

4/30

Pumped 34 bbl. net 24.3° oil and 2 bbl. water with 60 Mcf gas.

5/1

Blew down gas off well. Moved in production unit and pulled rods and tubing.

5/2

Ran bailer and found fill at 4875'. Bailed sticky mud to 5890'. Installed B.O.P.E. With bailer found fluid level at 3030' and bottom at 5890'. Pumped 100 bbl. salt water into casing - equivalent to 1700' inside the 8-5/8" casing. McCullough jet perforated (omega jets) three holes per foot 5827-5812' and 5808-5794' sticking the second gun. While working gun loose, fluid surfaced and pressure built up to 900# on lubricator before recovering gun. Closed off preventor, removed lubricator and tubing stripper, and installed blank flange on top of preventor. Installed needle bean in flow line from 2" outlet in casing head. Flowed 27 net bbl. oil in 19 hrs. on 14/64" bean, 640 Mcfd. 860#.

5/3

840 Mcf, 770#, 15/64", Laid down tubing and rods. Moved out pulling unit.

5/4-6/9

Well flowed gas with occasional slugs of oil which increased in volume as the pressure declined. The well was practically dead 6/9 and salt water was pumped into the well. During the interval from 5/2 to 6/9 the well produced 235 net bbl. of 25.0° oil and 17,000 Mcf. gas. There was no appreciable cut.

6/10-11

Pumped salt water into well at intervals. Well dead.

6/12-13

Moved in production unit. Rigged up bailing gate above B.O.P.E. Continued pumping water into casing as required to keep hole nearly full throughout this operation. Ran bailer and located fill at 5885'. Rigged up lubricator and McCullough reperforated two holes per foot: 5752-5733', 5728-5712' and 5707-5692', and perforated three holes per foot: 5430-5397'. Omega jets in 4" steel carrier were used throughout. Ran pump on 2-7/8" tubing to 4312' with gas anchor extending to 4348'. Ran rods. Moved out unit.

6/13

Well pumped water and 50 bbl. oil in 16 hrs with casing pressure building to 90#.

6/17

Pumped 29 bbl. oil and 26 bbl. water, 20#/300-540#.

6/22

Pumped 11 bbl. oil and 8 bbl. water, 20#/120-130#, 315 Mcf.

6/27

Pumped 22 bbl. oil and 6 bbl. water, 20#/110-120#, 296 Mcf.

DIVISION OF OIL AND
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JUL 3 1968

WELL CONDITION AT COMPLETION OF WORK:

TD 1st hole 5450', TD 2nd hole 5833' (redrilled from 3142' through 8-5/8" casing window 3139-3174'), TD 3rd hole 6540' (redrilled from cem. plug 5094').

CASING CONDITION:

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap WSO), CP 4393'. Perfs. 4393-4394' (WSO), 4407-4444', 4458-4498', 4562-4616', 5397-5430', 5692-5707', 5711-5728',

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Co. of Cal. FIELD Long Beach

Well No. "Oil Operators" 3, Sec. 13, T. 4S, R. 13W, SB B. & M.

Date July 2, 1968 Signed R. S. Ballantyne, Jr.

417 S. Hill Street 628-2156 Title Vice President

Los Angeles, 90013

(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

5733-5752', 5794-5808' and 5812-5827'. Plug 5964-5922' w/cem. and 5922-5890' w/sand.

Sidetracked:

8-5/8" C 3986', top 3174'. Plug 3174' (and open hole up to 3142')
5-1/2" C 5446', top 3928' (lap WSO). Bad 4195 and 5107', plgd.
Perf. & plgd. 4080-4158', 4190-4205', 4852-4950', 5140-5180',
5190-5200' and 5306-5355'. Plug 3928'.

DIVISION OF OIL AND
GAS RECEIVED

JUL 3 1968

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 168-562

Mr. C. G. Willis
417 So. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION COMPANY OF CALIFORNIA

Inglewood, Calif.
April 30, 1968

DEAR SIR:

(037-06496)

Your proposal to alter casing Well No. "Oil Operators" 3
Section 13, T. 4 S, R. 13 W, S.B.B. & M., Long Beach Field, Los Angeles County,
dated Apr. 25, 1968, received Apr. 26, 1968, has been examined in conjunction with records filed in this office.

~~Present conditions as shown by the records and the proposal are as follows:~~

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.
5-1/2" cp 4393'. TD 1st hole 5450', TD 2nd hole 5833'.

With reference to your proposal our decision is as follows:

DECISION

THE PROPOSAL IS APPROVED.

WLI:nw

cc Company

No Bond Required

F. E. KASLINE

E. R. MURRAY-AARON, State Oil and Gas Supervisor

By

Deputy

DIVISION OF OIL AND GAS

APR 26 1968

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

INGLEWOOD, CALIFORNIA

Los Angeles, Calif.

April 25, 1968

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. "Oil Operators" 3
(Cross out unnecessary words)

_____, Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 6540'.

2. Complete casing record, including plugs:

(Depths from present KB of 60')

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap WSO). Perfs. 4393-4394' (WSO), 4407-4444', 4458-4498', 4562-4616', 5692-5707', 5711-5728' and 5733-5752'.

Sidetracked:

8-5/8" C 3986', top 3174'. Plug 3174' (and open hole up to 3142')

5-1/2" C 5446', top 3928' (lap WSO). Bad 4195 and 5107', plgd.

Perf. & plgd. 4080-4158', 4190-4205', 4852-4950', 5140-5180', 5190-5200' and 5306-5355'. Plug 3928'.

3. Last produced. 4/25/68 34 2 60
(Date) (Oil, B/D) (Water, B/D) (Gas Mcf/D)

The proposed work is as follows:

1. Take well off production.
2. Starting May 1, 1968, pull rods and tubing.
3. Rig up B.O.P.E. and lubricator and pump 100 bbl. of salt water into casing.
4. Perforate 5397-5430', 5794-5808' and 5812-5827'. Reperforate 5692-5707', 5712-5728' and 5733-5752'.
5. Return well to production.

Alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			<i>X</i>	ARG	ARG

NO

417 S. Hill St., Los Angeles 90013

(Address)

628-2156

(Telephone No.)

GENERAL EXPLORATION COMPANY OF CALIFORNIA

(Name of Operator)

By *R. S. Ballantyne, Jr.*
R. S. Ballantyne, Jr., Vice President

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

WORK PERFORMED:

Drill _____ Redrill ☒ Deepen _____
 Plug _____ Alter casing _____
 Water flood _____ Water disposal _____
 Abandon _____
 Other _____

STATUS:

(Date)

Producing _____
 Recomp. prod. ☒ 7-28-67
 Water flood _____
 Water disposal _____
 Abandoned _____
 Other _____
 MAP AND BOOK NC

RECORDS FILED & DATE: Clerk M.T.RECORDS & REQUIREMENTS CHECKED: Eng. WJH

Summary (dup.) _____

✓ Log & Core (dup.) 8/3/67 ✓✓ History (dup.) 8/3/67 ✓✓ E-log (2 copies) 3138'-6536' 8/3/67 ✓

Radio log _____

D. Survey _____

Other _____

(Check records for signature
 and correct name of operator
 or well, S.T.R. and field.)

Location _____ Notice states _____

Elevation _____ Notice states _____

Production Reports _____

(If production reports not
 received, make notation and
 inform Sr. Steno. when rec'd.)

If stimulation or disposal well:
 Form 121 _____ Folder _____

Form 19-A

Surface inspection _____

Data needed none Clerk:

Request records _____ F 170

Correct records _____ F 165
 (Specify) 165A

CARDS NCBOND: NO. 141161 dated 6-27-67

Hold _____ Reason _____

Release ☒ Date elig. 10-17-67 F 150b AB

End premium year ☒
 Release requested _____ (Check)
 Bond superseded _____ (one)
 Well abandoned _____

FINAL LETTER _____ F 159

and
 FILE CLEARED _____ F 121

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of CaliforniaWell No. "Oil Operators" 3, Sec. 13, T. 4 S., R. 13 W., S.B.B. & M.Date July 31,, 19 67

Signed

R. S. Ballantyne, Jr.417 South Hill St., Los Angeles 90013 628-2156 Title Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1967 Note: Depth measurements taken from present K.B. elevation of 60' which is 6' higher than original datum. Ground elevation is 48'.

6/30 Moved in, rigged up drilling equipment, pulled and laid down tubing, installed B.O.P.E. (Graham Drilling Company).

7/1-2 Ran 7-5/8" bit and made up 3-1/2" drill pipe. Found top of 5-1/2" liner at 3932'. Ran Servco section mill, located casing collars at 3190', 3145' and 3101', milled section in 8-5/8" casing from 3139' to 3174'. Opened window to 12-3/4". Ran 284' of 2-3/8" tubing stinger on drill pipe. Cleaned out sand inside 5-1/2" liner to 4165'. Laid 30-sack class G cement plug with 2% CaCl₂ from 4147'. (Estimated top of plug at 3908'.) Laid 70-sack class G plus 20% sand with 0.5% CFR-2 from 3233' with rotating tubing scratchers opposite window. Pulled to 2850' and circulated pipe clean. Held 1200# for 5 minutes - no pressure drop. Found top of cement at 3077' and cleaned out to 3142'.

7/3-13 Drilled 7-5/8" hole to 5833'. 5" Dynadrills were used as follows: 3142-3240', 4257-4378' and 4487-4575'. The interval 4468-4487' was cored.

7/13 Ran Schlumberger I.E.S. 5833-3139' and C.D.M. 5833-3700'. Laid 182 CF (160 sacks class G, 30 sacks sand, 5 sacks salt, 0.5% CFR-2) plug through 461' stinger of tubing on drill pipe from 5460'.

7/14 Ran 7-5/8" bit and hit bridge at 4135', cleaned out to 4174' and lost circulation. Pulled up inside 8-5/8" casing to 3123' and regained circulation. Ran to top of cement at 4997' and cleaned out to 5012' without circulation. Pulled up again to 3123' and introduced rubber and fibrous lost circulation material into mud system. Regained circulation and ran to 5012' circulating in stages. Drilled out cement to 5094' with full returns.

7/15-18 Drilled 7-5/8" hole to 6008'. A 5" Dynadrill was used from 5094' to 5147'. Ran Schlumberger I.E.S. 6008-4850'.

7/18-20 Drilled 7-5/8" hole to 6540' (T.D.). Ran Schlumberger I.E.S. 6540-6008'.

7/20 Ran to T.D. and conditioned mud. Ran 76 joints of 5-1/2", 15.5#, J-55 liner with Burns liner hanger (2921', including hanger) on 3-1/2" drill pipe. With liner hanging at 5964', (top at 3043') cemented with 743 C.F. 1:1 class G cement pozmix slurry with 2% gel and 0.5% CFR-2 and 10% salt in mix water. 500 gal. mud flush and 20 C.F. water preceded the slurry. Displaced with 530 CF mud (509 CF estimated) and plug was not observed to hit baffle. Pulled stinger up to 2980' and backscuttled 180 CF (127 CF in drill pipe) without cement returns.

DIVISION OF OIL AND GAS
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AUG 8 1967

INGLEWOOD, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Page 2

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of California

Well No. "Oil Operators" 3, Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.

Date July 31,, 19 67 Signed R. S. Ballantyne, Jr.

417 South Hill St., Los Angeles 90013 628-2156 Title Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

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Date

- 7/21 Ran 7-5/8" bit and 8-5/8" casing scraper. Encountered 10' soft cement bridge at 1000' and drilled out same. Pushed plug to top of hard cement at 2832'. Drilled out cement to top of liner at 3043'. Conditioned mud and held 1380# on casing for 5 minutes. Ran 4-3/4" bit and 5-1/2" casing scraper. Drilled out cement inside liner from 3043' to 3083'. Ran to 5922', top of float collar, pushing something (probably rubber liner wiper plug) ahead the last 1000'. Conditioned mud and held 1530# on casing for 5 minutes.
- 7/22 Ran Cook tester on drill pipe and set packer at 3009' with tail to 3022'. Open 1 hour. 2 minute initial light blow and dead thereafter. Recovered net rise of 45' drilling fluid. Lap test approved by D.O.G. Ran McCullough gamma-bond cement log 5910-3900' and perforated four 1/2" jet holes 4394-4393'. Ran Cook tester on 1411' of 2-7/8" tubing below drill pipe. Set packer at 4366' with tail piece to 4377'. Open 1 hour. Medium, slightly diminishing blow throughout test. Recovered 1470' slightly muddy water down to salty (476 g/g) water.
- 7/23 Ran Baker shoe squeeze tool on tubing and set packer at 4094' with tail to 4187'. Broke down formation with 3500# and squeezed 33 sacks of 50 sacks class G cement mixed at a final pressure of 3000# through perforations. Found top of cement at 4243' and drilled out cement running out of it at 4425'. Perforated four 1/2" jet holes 4394-4395' with McCullough steel carrier. Ran Cook tester on tubing/drill pipe and set packer at 4366' with tail to 4377'. Open 1 hour-initial 2 minute weak blow and dead thereafter. Recovered a rise of 40' drilling fluid. W.S.O. approved by D.O.G.
- 7/24 Ran 4-3/4" bit to 5922' and changed mud over to 67# salt water. Laid down 3-1/2" drill pipe. Ran McCullough 4" jet carrier and perforated four 1/2" jet holes per foot as follows: 5752-5733', 5728-5711' and 5707-5692.
- 7/25 Ran Guiberson packer on combination string of 2-7/8" tubing and set with bottom of packer at 4337'. Removed B.O.P.E. and rigged up surface equipment. Swabbed well and when pulling from 2200' the sand line pulled out of socket and swab dropped. Opened valve in packer and equalized fluid. Ran overshot but could not recover swab. Installed B.O.P.E., pulled and broached tubing. Recovered swab on bottom.
- 7/26 Re-ran Guiberson packer as above. Swabbed well working down to 4000'. After swabbing 67 bbl. of water with trace of oil and with well gassing, placed on a 22/64" bean at 9:00 p.m.
- 7/27 Rigged up lubricator and McCullough perforated four holes per foot with 2-1/8" JRL Ceram-jets as follows: 4616-4562', 4498-4458' and 4444-4407'. Completed perforating at 10:00 p.m.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS Page 3

History of Oil or Gas Well

OPERATOR General Exploration Company FIELD Long Beach
of CaliforniaWell No. "Oil Operators" 3, Sec. 13, T. 4 S, R. 13 W, S.B.B. & M.Date July 31, 19 67

Signed

R. S. Ballantyne, Jr.417 South Hill St., Los Angeles 90013

(Address)

(Telephone Number)

Title Vice President

(President, Secretary or Agent)

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Date

7/28
7/30

Moved out drilling equipment. Flowed 94 bbl. 25.3° oil, 4.0%, 140#/pkr., 570 Mcf.
103 bbl. 25.2°, 6.5%, 120#/pkr., 555 Mcf.

Casing Record at Completion of Work:

(Depths from present KB of 60') T.D. 6540

13-3/8" C 765'

8-5/8" C 3139'

5-1/2" C 5964', top 3043' (lap WSO). Perfs. 4393-4394' (WSO), 4407-4444',
4458-4498', 4562-4616', 5692-5707', 5711-5728' and 5733-5752'.Sidetracked:

8-5/8" C 3986', top 3174'. Plug 3174' (and open hole up to 3142')

5-1/2" C 5446', top 3928' (lap WSO). Bad 4195 and 5107', plgd.

Perf. & plgd. 4080-4158', 4190-4205', 4852-4950', 5140-5180', 5190-5200'
and 5306-5355'. Plug 3928'.

Orig
abandoned
well

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator General Exploration Company of Calif. Field Long Beach

Well No. "Oil Operators" #3 Redrill Sec. 13, T. 45, R. 13W, S. 8. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4468'	4487'	21'		12.5 <u>12.5</u>	<u>CORE #1</u> Oil sand, unbroken, firm to soft, mostly fine to medium fine poorly sorted. Locally finely pebbly, light brown with grayish cast on broken surfaces light gold to medium buff fluorescence, pepper and salt on broken surfaces (mud penetration?). In top 0.2' two 1/16" ribbons gray sand at 50-55° under gray spot with pebbles. No fluorescence. Probably related to turbidity bedding. At 4.0', one 1/64" ribbon of non-fluorescent clay at about 40°, could be bedding parting. Dip not reliable. (No samples taken)

DIVISION OF OIL AND
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AUG 3 1967

INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T 167-670

Mr. C. G. Willis
417 S. Hill Street
Los Angeles, California 90013
 Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
July 27, 1967

DEAR SIR: (037-06496)

Your well No. "Oil Operators" 3, Sec. 13, T. 4 S, R. 13 W, S.B.B & M.
Long Beach Field, in Los Angeles County, was tested for water shut-off
 on July 23, 1967 Mr. S. Cordova, Engineer, designated by the supervisor was present
 from 8:30 p.m. to 9:30 p.m. as prescribed by law; there were also present J. Dedmon, Drilling
Foreman & R. Morgan, Driller

Shut-off data: 5-1/2 in. 15.5 lb. casing was re cemented through perforations at 4393 ft.
 on July 23, 1967 in 7-5/8 in. hole with 50 ~~more~~ sacks of cement
of which 33 sacks was squeezed away under a final pressure of 3000 Psi
calculated to fill behind casing to ----- ft. below surface.

Casing record of well: 13-3/8" cem. 765'; 8-5/8" cem. 3986', window 3139'-3174', sidetracked
@ 3142'; 5-1/2" cem. 3043'-5964', cp 4393', perf. 4393' WSO. TD 1st hole 5450'.
TD 2nd hole 5833'.

Present depth 6540 ft. cmt. bridge 5964 ft. to 5922 ft. Cleaned out cmt. 4243 ft. to 4425 ft. for test.
 A Cook tester was run into the hole on 2-7/8 in. ~~tail pipe~~ tubing,
 with ---- ft. of water-mud cushion, and packer -- set at 4366 ft. with tailpiece to 4377 ft.
 Tester valve, with 5/8 in. bean, was open for 1 hr. and ----- min. During this interval there was a
weak blow for 2 minutes & no blow thereafter.

Mr. ----- reported:

MR. S. CORDOVA, ENGINEER, WAS PRESENT AT THE WELL FROM 5:00 P.M. TO 6:00 P.M. ON
 JULY 22, 1967 AND MR. L. STANDER REPORTED THAT the 5-1/2" casing was jet-perforated
 with four, 1/2" holes at 4393' for the water shut-off test.
 THE ENGINEER NOTED THAT when the tubing was removed, 1470' of watery drilling fluid
 and salt water was found above the tester.

MR. S. CORDOVA, ENGINEER, WAS PRESENT AT THE WELL FROM 8:30 P.M. TO 9:30 P.M. ON
 JULY 23, 1967 AND MR. DEDMON REPORTED:

1. The 5-1/2" casing was recemented as noted above.
2. The 5-1/2" casing was jet-perforated with four, 1/2" holes at 4393'.

THE ENGINEER NOTED:

1. When the tubing was removed, 40' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

THE 5-1/2" SHUT-OFF AT 4393' IS APPROVED.

SC:nw

cc Company

E. R. MURRAY-AARON

State Oil and Gas Supervisor

By E. R. Murray-Aaron

Deputy

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 167-669

Mr. C. G. Willis
417 S. Hill Street
Los Angeles, California 90013
Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
July 27, 1967

DEAR SIR: (037-06496)

Operations at well No. "Oil Operators" 3, Sec. 13, T. 4 S, R. 13 W, S.E. B & M.
Long Beach Field, in Los Angeles County, were witnessed
on July 22, 1967. Mr. S. Cordova, Engineer, representative of the supervisor was present
from 7:30 a.m. to 8:20 a.m. There were also present R. Ballantyne, Engineer &
J. Dedmon, Drilling Foreman

Present condition of well: 13-3/8" cem. 765'; 8-5/8" cem. 3986' window 3139'-3174', side-
tracked @ 3142'; 5-1/2" cem. 3043'-5964'. TD 6540'. TD 1st hole 5450'. TD 2nd hole
5833'.

The operations were performed for the purpose of demonstrating the effectiveness of the seal
between the 8-5/8" and 5-1/2" casings.

Mr. Ballantyne reported:

1. A window was milled in the 8-5/8" casing from 3139' to 3174', and the hole was opened to 12-3/4" in that interval.
2. Sand fill was cleaned out of the 5-1/2" casing to 4165'.
3. On July 2, 1967, 30 sacks of cement was pumped into the hole through drill pipe and tubing hanging at 4147', calculated to fill to 3908'.
4. On July 2, 1967, 70 sacks of cement mixed with 20% sand was pumped into the hole through drill pipe and tubing hanging at 3233'.
5. Cement was drilled out of the hole from 3077' to 3142'.
6. A 7-5/8" hole was redrilled from 3142' to 5833'.
7. On July 13, 1967, 160 sacks of cement mixed with 20% sand was pumped into the hole through drill pipe and tubing hanging at 5460'.
8. Cement was drilled out of the hole from 4997' to 5094'.
9. A 7-5/8" hole was redrilled from 5094' to 6540'.
10. On July 20, 1967, 5-1/2", 15.5 lb. casing was cemented from 3043' to 5964' with 743 cubic feet of cement slurry (1:1 pozmix, 2% gel).
11. Cement was drilled out of the 8-5/8" casing to 3043' and the 5-1/2" casing was cleaned out to 5922'.
12. A Cook tester was run into the hole on 3-1/2" drill pipe and packer set at 3009', with tailpiece to 3020'.
13. The tester valve with 5/8" bean was open for 1 hr. During this interval there was a weak blow for 2 minutes and no blow thereafter.

THE ENGINEER NOTED:

1. When the drill pipe was removed, 45' of drilling fluid was found above the tester.
2. The pressure charts indicated the tester tool functioned properly.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED and indicate that no fluid has access to the well from the annulus between the 8-5/8" and 5-1/2" casings.

E. R. MURRAY-AARON
State Oil and Gas Supervisor

SC:nw
cc Company

By [Signature]

Deputy

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 167-705

Mr. C. G. Willis
417 S. Hill Street
Los Angeles, California 90013
 Agent for GENERAL EXPLORATION CO. OF CALIF.

Inglewood, Calif.
July 5, 1967

DEAR SIR:

(037-06496)

Your proposal to redrill Well No. "Oil Operators" 3,
 Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
 dated June 27, 1967 received June 29, 1967, has been examined in conjunction with records filed in this office.
 Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 5450
2. Complete casing record, including plugs:
 13-3/8" C 765'
 8-5/8" C 3986' WSO
 5-1/2" C 5446', top 3928', WSO on splice. Bad 4195 & 5107', plgd.
 perf. & plgd. 4190-4205', 4852-4950', 5140-5180',
 5190-5200', 5306-5355'.
 Plug 4159'. Perf. 4080-4158'.
3. Last produced.

12/12/66	10	182	-
(Date)	(Oil, B/D)	(Water, B/D)	(Gas) "

PROPOSAL

"The proposed work is as follows:

1. Move in drilling equipment, pull tubing, install BOPE and fill hole with mud.
2. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 12-3/4" lay cement plug from 4150' to 3900' (sufficient to cover perforations without having to wait and feel for top) and another plug from 100' below section back above top of window and level off plug 2' into section.
3. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 5900'.
4. Run and cement 5-1/2" liner, effect. W.S.O. at lap of 8-5/8" casing and above productive horizon.
5. Complete well."

DECISION

THE PROPOSAL IS APPROVED PROVIDED:

1. Fluid consistent with good drilling practice shall be used, and the column of fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
 - a. A test, after cleaning out below the top of the liner to demonstrate that no fluid has access to the well from the annulus between the 8-5/8" and 5-1/2" casings.
 - b. A test of the effectiveness of the 5-1/2" shut-off above the zone to be produced.

WLI:mw
 cc Company

Bond No. 1411161
 Dated 6-27-67

E. R. MURRAY-AARON, State Oil and Gas Supervisor

By [Signature], Deputy

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED

JUN 29 1967

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well, CALIFORNIA

This notice must be given before work begins; one copy only

Los Angeles, Calif. June 27, 1967

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or altering casing~~ at Well No. "Oil Operators" 3
(Cross out unnecessary words)

, Sec. 13, T. 4 S, R. 13 W, S.B. B. & M.

Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 5450

2. Complete casing record, including plugs:

13-3/8" C 765'

8-5/8" C 3986' WSO

5-1/2" C 5446', top 3928', WSO on splice. Bad 4195 & 5107', plgd.
Perf. & plgd. 4190-4205', 4852-4950', 5140-5180',
5190-5200', 5306-5355'.
Plug 4159'. Perf. 4080-4158'.

3. Last produced. 12/12/66 10 182 -
(Date) (Oil, B/D) (Water, B/D) (Gas)

The proposed work is as follows:

1. Move in drilling equipment, pull tubing, install BOPE and fill hole with mud.
2. Mill out 30-foot section of 8-5/8" casing near 3100', underream the window to 12-3/4" lay cement plug from 4150' to 3900' (sufficient to cover perforations without having to wait and feel for top) and another plug from 100' below section back above top of window and level off plug 2' into section.
3. Sidetrack cased hole through section and drill 7-5/8" hole to approximately 5900'.
4. Run and cement liner, effect W.S.O. at lap of 8-5/8" casing and above productive horizon. 5 1/2"
5. Complete well.

Redrill

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			#1411161 6-27-67	as	as

417 S. Hill Street, Los Angeles

(Address)

628-2156

(Telephone No.)

GENERAL EXPLORATION COMPANY OF CALIFORNIA

By *R. S. Ballantyne*
(Name of Operator)
R. S. Ballantyne, Vice President

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or County **Long Beach** District **1**
Former Owner: **Union Oil Co. of California** Date **January 17, 1961**
Description of Property **Sec. 13, T. 4 S., R. 13 W., S. 2. S. 2 E.**

List of Wells **"Oil Operators" 1, "Oil Operators" 2, "Oil Operators" 3 and "Oil Operators" 4. ("Oil Operators" 1, 181e; other wells are active)**

Date of Transfer **January 1, 1961**
New Owner: **General Exploration Co. of California**
Address: **750 Subway Terminal Building, 417 South Hill Street, Los Angeles 13, Calif.**

Telephone No.

Type of Organization **Corporation**
Reported by: **Union Oil Co. of California (Letter of January 6, 1961)**
Confirmed by: **General Exploration Co. of California (Letter of January 11, 1961)**
New Operator New Status **PA**, Old Operator New Status **PA**
Request designation of agent **No**

Remarks:

eb
cc- Mr. E. H. Hesser
Prod. Dept.
Conservation Committee

Wm. C. Bickley

Deputy Supervisor

	INITIALS	DATE
Form 121		
New Well Cards		
Well Records		
Electric Logs		
Production Reports		
Map and Book		
Form 148		
Notice to be cancelled		

LEGEND

PA—Producing Active
NPA—Non Potential Active
PI—Potential Inactive
NPI—Non Potential Inactive
Ab—Abandoned or No More Wells
NOTE—If Transfer Does Not Change Overall Status Enter "No Change"

Form 10

CLERK

RECEIPT FOR

Date Received 1-13-60 Form 100 101 103 : New Well Records

Elec. Log Radio Log : Subsequent Work

Direct. Surv. Other Data History : Well Summary

Location : (100)

 : Drillers Log

Elevation Clerk Scott : (101)

Prod. Repts. Clerk : Core Record

COMPLETED PRODUCING ON 12-10-59 : History

ABANDONED ON : (103)

BOND Handwritten Release Date Elig. 150b : Elec. Log

End Prem. year Release Requested Superseded : Other

Aband. : Redrill

HOLD BOND Reason : Deepen

 : Plug

Data Needed : Alter Csg.

 Final Letter Eng. RC : Abandon

DIVISION OF OIL AND GAS
UNION OIL COMPANYDIVISION OF OIL AND GAS
RECEIVED

JAN 1 1958

WELL NO. Oil Operators #3Long Beach
(FIELD)Los Angeles
(COUNTY)History of Oil or Gas Well
REPAIR REPORTProd. Hoist - Contract
(TOOLS)INGLEWOOD, CALIFORNIASee belowSEC. 13 T. 4-S R. 13-W S.E. B. & M.December 7, 1959

(PERIOD ENDING)

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1959			
				<u>CHARGE: BR-AFE 59359 Job 540</u> <u>PROPOSED WORK: Add perforations in the Alamitos Zone.</u> <u>PRODUCTION BEFORE WORK: Idle</u> <u>ZERO POINT FOR THIS JOB: 9.1' above concrete pad.</u>
				<u>CASING RECORD AT START OF WORK:</u> TD 4076' : Dpnd 5450' : Plug 4985' 13-3/8" C 765' 8-5/8" C 3986' WSO 116-6-5/8" H-4075' incl. -89' -pf. Fulled. 1518' 5-1/2" F & C 5446'. Bad 4195 & 5107'. WSO test on splice OK. bullet pf 4190-4205, 4852-4950'. " " & plgd 5140-5180, 5190-5200, 5306-5355'.
				<u>CASING RECORD AT COMPLETION OF WORK:</u> TD 4076' : Dpnd 5450' : Plug 4159' 13-3/8" C 765' 8-5/8" C 3986' WSO 116-6-5/8" H-4075' incl. -89' -pf. Fulled 1518' 5 1/2" F & C 5446'. Bad 4195 & 5107' Flgd. WSO test on splice OK. Bullet pf & plgd 4190-4205, 4852-4950' 5140-5180, 5190-5200, 5306-5355'. bullet pf 4080-4158'.
1	12-2	Dpnd 5450	Plug 4985	Contractor moved in and rigged up. Fulled rods and pump. Dia-Loyed tubing.
1	12-3	"	"	Pulled tubing. Strung in with 2-5/8" Cavins sand pump to 4201', top of fill. 4-5/8" impression block stopped at 3927'. 4-1/4" block stopped at 3927'. 3-3/4" block stopped at 3927'. Ran in with 2-5/8" Cavins sand pump, went to 4201'. Fluid level at 500'.
2	12-4	"	"	Ran in with 1-7/8" x 4-1/8" x 2.59' Haash-koss tapered mill on 3-1/2" bumper sub on 2-1/2" tubing on 3" tubing. Ran in to top of liner at 3927'. Pipe did not appear to be bad. Ran in to 4186' where mill stopped. Fulled back up to top of liner and worked mill through liner hanger repeatedly. Pulled out. Ran L-W Cemoton and Chlorinilog.
1	12-5	"	"	Finished running L-W Cemoton and Chlorinilog.
	12-6	"	"	Crew off.
2	12-7	"	4200	Ran in with 7 1/2" impression block to top of liner at 3928'. No impression. Ran impression block to top of liner. Bailed sand and shale at 4201' with 2-5/8" Cavins sand pump. Bailer sticking badly at 4201'. Recovered small loads. Bright spot on bottom of bailer indicates possible tight pipe. <u>Dumped 1 1/2" sacks construction cement at 4201' at 2:30 p.m.</u> Felt for cement at 5:30 p.m. Top of cement at 4200'.

NAMES OF DRILLERS/HEAD WELL PULLERS:

California Production Service - Contractor

Vaughn S. Meyer
DISTRICT ENGINEER

DIVISION OF OIL AND GAS
UNION OIL COMPANY

CASING RECORD

WSO

WELL NO. Oil Operators #3Long beach
(FIELD)Los Angeles
(COUNTY)SEC. 13, T. 4-S, R. 13-W.S.B. & M.History of Oil or Gas Well
REPAIR REPORTProd. Hoist - Contract
(TOOLS)December 20, 1959
(PERIOD ENDING)13-3/8" C 765' : 8-5/8" C 3986
116-6-5/8" H-4075' - 100-80' - 111d
1518' 5-8" F & C 5446. Had 4195-8-5107,
Flgd. #30 test on splice OK
bullet pf & plgd 4190-4205, 4862-4950
5140-5180, 5190-5200, 5206-5255
bullet pf 4080-4158'.

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																																																				
	1959																																																																																							
1	12-8	Dpnd 5450	Plug 4200	Ran in with Cavins off bottom cement dump bailer and <u>dumped 2 sacks construction cement at 4200'</u> at 9:30 a.m. Felt for top of cement with bailer jars at 12:30 p.m. No fill. <u>Dumped 2 sacks construction cement at 4200'</u> at 1:30 p.m. Felt for top of cement at 4:30 p.m. No fill. <u>Dumped 2 sacks of construction cement at 4200'</u> at 5:45 p.m.																																																																																				
1	12-9	"	" 4159	Ran in with jars and found top of cement at 4200'. <u>Mixed 4 sacks of construction cement and dumped in 2 runs at 4200'</u> . Finished dumping cement at 9:00 a.m. Felt for plug at 12:00 noon. Located top of plug at 4174'. Rigged up to shoot.																																																																																				
2	12-10	"	" 4159	<u>Perforated 5-1/2" liner from 4158-4080' with two 1/2" bullets per foot.</u> Used L-W 4" x 50 shot wire line gun. Checked collars and reset odometer according to collars. <u>Located top of plug at 4159'</u> . Fluid level stayed at 540' during shooting job. No blow. All guns came from hole covered with oil. Had 2 scattered missfires. Checked bottom at 4159' after shooting. Removed blow-out preventer. Ran in and landed tubing. Ran rods. Put well on production. Contractor moved out.																																																																																				
				<u>PRODUCTION DATA</u>																																																																																				
				<table><tr><th>Hrs</th><th>Gross</th><th>Net</th><th>Cut</th><th>Gray.</th><th>MCF</th><th>Remarks</th></tr><tr><td>12-10</td><td>132</td><td></td><td></td><td></td><td></td><td>No cut obtained.</td></tr><tr><td>12-11</td><td>175</td><td>107</td><td>39.0</td><td>23.3</td><td>Tr.</td><td></td></tr><tr><td>12-12</td><td>134</td><td>82</td><td>39.0</td><td>23.3</td><td>"</td><td></td></tr><tr><td>12-13</td><td>168</td><td>102</td><td>39.0</td><td>23.3</td><td>"</td><td></td></tr><tr><td>12-14</td><td>167</td><td>90</td><td>46.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-15</td><td>107</td><td>66</td><td>38.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-16</td><td>98</td><td>61</td><td>38.0</td><td>23.3</td><td>20</td><td>1020' fluid over pump by Sonic</td></tr><tr><td>12-17</td><td>95</td><td>57</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-18</td><td>118</td><td>71</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-19</td><td>131</td><td>79</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr><tr><td>12-20</td><td>134</td><td>80</td><td>40.0</td><td>23.3</td><td>20</td><td></td></tr></table>	Hrs	Gross	Net	Cut	Gray.	MCF	Remarks	12-10	132					No cut obtained.	12-11	175	107	39.0	23.3	Tr.		12-12	134	82	39.0	23.3	"		12-13	168	102	39.0	23.3	"		12-14	167	90	46.0	23.3	20		12-15	107	66	38.0	23.3	20		12-16	98	61	38.0	23.3	20	1020' fluid over pump by Sonic	12-17	95	57	40.0	23.3	20		12-18	118	71	40.0	23.3	20		12-19	131	79	40.0	23.3	20		12-20	134	80	40.0	23.3	20	
Hrs	Gross	Net	Cut	Gray.	MCF	Remarks																																																																																		
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NAMES OF DRILLERS/HEAD WELL PULLERS:

California Production Service - Contractor

Vaughn S. Meyer
DISTRICT ENGINEER

COMPLETED PRODUCING ON 12-10-59

ABANDONED ON _____

Cordova/Ballantyne 7-2-67

Solid sand at 4000'.

O.K. to p/c 4000'-3878'; using 100%
excess per conversation with Ingram
on 6-29-67.

Ballantyne/Ingram 6-29-67

will use 100% excess on zone plug
in lieu of feeling for top - a.k. w2

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P 159-888

Mr. C. F. Bowden
P. O. Box 7600
Los Angeles 54, California
Agent for UNION OIL COMPANY OF CALIFORNIAInglewood 3, Calif.
October 22, 1959

DEAR SIR:

Your _____ proposal to alter casing Well No. "Oil Operators" 3,
Section 13, T. 4 S, R. 13 W, S B B. & M., Long Beach Field, Los Angeles County,
dated Oct. 19, 1959, received Oct. 21, 1959, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE.
Plugged with cement 5446'-5428' and 5101-4984'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 4076' Dpnd 5450' Plug 4985'
2. Complete casing record.
13-3/8" C 765'
8-5/8" C 3986' WSO
116'-6-5/8"-H-4075' incl. -89'-pfs., pulled.
1518' 5-1/2" F & C 5446'. Bad 4195' & 5107'.
WSO test on splice OK.
Bullet pf. 4190-4205' & 4852-4950'.
Bullet pf. & plgd. 5140-5180', -5190-5200', -5306-5355'.
3. Last produced. April 1958 2 B/D 23.7° 98.0%
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL

"The proposed work is as follows:

1. Pull rods and tubing.
2. Check hole open to top of plug at 4985'.
3. Check condition of 5-1/2" liner with impression blocks.
4. Perforate 5-1/2" liner from 4080-4185' with two 1/2" bullets per foot.
5. Check hole open to top of plug at 4985'.
6. Run rods and tubing.
7. Test on production."

DECISION

THE PROPOSAL IS APPROVED.

RC:omh

cc Vaughn S. Moyer Div. Eng.
9645 South Santa Fe Springs Rd.
Santa Fe Springs, California

E. H. MUSSER, State Oil and Gas Supervisor

By Wm. C. Bailey, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

OCT 21 1959

INGLEWOOD, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Santa Fe Springs, Calif.		October 19, 1959	
DIVISION OF OIL AND GAS	MAP	MAP BOOK	CARDS
Inglewood, Calif.			BOND
			FORMS
			114 121

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. OIL OPERATORS #3

(Cross out unnecessary words)

Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 4076' Dpnd 5450' Plug 4985'
- Complete casing record.
 - 13-3/8" C 765'
 - 8-5/8" C 3986' WSO
 - 116-1-6-5/8" H 4075' incl. 89' pfs., pulled.
 - 1518' 5-1/2" F & C 5446'. Bad 4195' & 5107'.
 - WSO test on splice OK.
 - Bullet pf. 4190-4205' & 4852-4950'.
 - Bullet pf. & plgd. 5140-5180', 5190-5200', 5306-5355'.

3. Last produced. April 1958 2 B/D 23.7° 98.0%

(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

- Pull rods and tubing.
- Check hole open to top of plug at 4985'.
- Check condition of 5-1/2" liner with impression blocks.
- Perforate 5-1/2" liner from 4080-4185' with two 1/2" bullets per foot.
- Check hole open to top of plug at 4985'.
- Run rods and tubing.
- Test on production.

Union Oil Company of California

(Name of Operator)

By

V. S. Meyer R.S.H.
Vaughn S. Moyer, Division Engineer

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

rjh

STENOGRAPHER

: RECEIPT FOR

Date Received 7-30-53 Form 100 101 103

: Well Summary

Elec. Log Radio Log

: Drillers Log

Direct. Surv. Other Data History

: Core Record

Location

: History ☒Elevation Steno. scat

: Elec. Log

ENGINEER

: Radio Log

BOND Blanket Release Date Elig. 150b

: Direct. Surv.

End Prem.Yr. Release Requested Superseded Aban.

: Redrill

HOLD BOND Reason

: Deepen

Data Needed None: Plug ☒Final Letter Eng. 7-30-53: Alter Csg. ☒

: Abandon

JLW

VISION OF OIL AND GAS

UNION OIL COMPANY
History of Oil or Gas Well

REPAIR REPORT

Prod. Hoist - Contract

(TOOLS)
July 8, 1953

(PERIOD ENDING)

CASING RECORD 1053

See below LOS ANGELES, CALIFORNIA

(NOTE INEFFECTIVE CASING)

Oil Operators #3

WELL NO.

Long Beach

(FIELD)

Los Angeles

(COUNTY)

SEC. 13 T. 4-S R. 13-W S.B. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	CHARGE: B.R.-A.F.E. 51528 Job 231-0	REMARKS
	1953				<u>PROPOSED WORK:</u> Cement off bottom perforations with plug from 5107' to 5000'. Test on production. If upper perforations not causing sand, gun perforate 5-1/2" casing from 4950' to 4852' with four 1/2" holes/ft. <u>PRODUCTION BEFORE REPAIR:</u> 57 B/D Gross - 14 B/D Net - 75.0% Cut <u>ZERO POINT</u> for this job: 9' 1" above concrete pad. <u>CASING RECORD AT START OF WORK:</u> 8-5/8" Dpn 5150' 13-3/8" C 765' 8-5/8" C 3986' WSO 226-6-5/8" H 4975' inc 89' perf. Pulled 1518' 5-1/2" F & C 5146' Bad 4195' & 5107' WSO test on splice OK Bullet perf. 4190-4205' Bullet perf. & plugged 5140-5180, 5190-5200, 5306-5355' <u>CASING RECORD AT COMPLETION OF WORK:</u> 8-5/8" Dpn 5150' Plug 4985' 13-3/8" C 765' 8-5/8" C 3986' WSO 226-6-5/8" H 4975' inc 89' perf. Pulled 1518' 5-1/2" F & C 5146' Bad 4195' & 5107' WSO test on splice OK Bullet perf. 4190-4205' and 4852-4950' Bullet perf. & plugged 5140-5180, 5190-5200, 5306-5355'
1	7-6	5150	Plug 4955	California Production Service, Contractors, moved in and set up equipment. Tested tubing - OK. Pulled tubing and rods. Tubing measured 4179.72'. Ran 2-5/8" Cavins bailer. Checked fill at 4938'. Fluid level at 3685'. Cleaned out to 4955'.	
1	7-7	5150	Plug 4985	Continued cleaning out sand to 4985'. Installed Shaffer blow-out preventer. Ran in with Lane-Wells 4" x 13' type A-2 bullet gun, shot four 1/2" holes/foot from 4950' to 4852'. Had light blow and rapid fluid rise. Fluid level at start of shooting 3425'; fluid level at finish 3220'.	
1	7-8	5150	Plug 4985	Blid off 35# casing pressure. Ran 2-5/8" Cavins sand pump. Checked fill at 4963'. Fluid level at 3170'. Cleaned out to 4985'. Ran in and landed 4788' of mixed 2-1/2" and 3" tubing. Ran rods and pump. Contractor moved out July 8, 1953. Well on production at 5:30 P.M.	

NAMES OF DRILLERS/HEAD WELL PULLERS:

Calif. Prod. Service, Contractors

Chas. F. Bowden

DISTRICT ENGINEER

VISION OF OIL AND G

UNION OIL COMPANY

History of Oil or Gas Well

REPAIR REPORT

Prod. Holst - Contract

(TOOLS)

July 26, 1953

(PERIOD ENDING)

CASING RECORD

See previous sheet

(NOTE INEFFECTIVE CASING)

WELL NO. Oil Operators #3
Long Beach
(FIELD)
Los Angeles
(COUNTY)
13 4-S 13-W S.E.
SEC. 13, T. 4-S, R. 13-W S.E. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS				
		5150	Plug 4985	<u>PRODUCTION DATA</u>				
		<u>Hours</u>	<u>Gross</u>	<u>Net</u>	<u>Cut</u>	<u>Grov.</u>	<u>MCF</u>	<u>Remarks</u>
	7-8	13	35	0	100.0			
	7-9	24	78	0	100.0			
	7-10	24	95	34	69.0			
	7-11	24	76	32	58.0		25	
	7-12	24	76	27	64.0		22	
	7-13	24	66	17	75.0		8	
	7-14	24	72	37	48.0	23.1	8	
	7-15	0						Sanded up
1	7-16							Union Oil production crew pulled rods and tubing.
1	7-17							Cleaned out 4725-4757' with 3-1/8" Cavins sand pump.
1	7-18							Cleaned out 4757-4820' with 3-1/8" Cavins sand pump.
1	7-19							Cleaned out 4820-4985' with 3-1/8" Cavins sand pump. Recovered shale and pieces of iron. Fluid level 3300'. Ran tubing to 4200'.
1	7-20							Cleaned out off bottom with 3-1/8" Cavins sand pump. Ran tubing to 1900'.
1	7-21	17	69	44	36.0			Ran rods. Put well on prod.
	7-22	24	91	46	49.0			
	7-23	24	91	61	33.0	23.8		
	7-24	24	82	45	45.0	23.6	2	
	7-25	24	73	37	49.0		2	
	7-26	24	69	35	49.0	23.7	2	

1 NAMES OF DRILLERS/HEAD WELL PULLERS:
Call. Prod. Service, Contractors, to 7-8-53.
Union Oil Prod. Crew 7-16-53 to 7-22-53

Chas. F. Bowden

DISTRICT ENGINEER

STENOGRAPHER

Date Received 7-3-53 Form 100 101 103

Elec. Log _____ Radio Log _____

Direct. Surv. _____ Other Data History

Location _____

Elevation _____ Steno. EB

ENGINEER

EB BOND Blanket Release _____ Date Elig. 150b

End Prem.Yr. _____ Release Requested _____ Superseded _____ Aban. _____

HOLD BOND _____ Reason _____

Data Needed NoneFinal Letter _____ Eng. VLW

: RECEIPT FOR

: Well Summary _____

: Drillers Log _____

: Core Record _____

: History ✓

: Elec. Log _____

: Radio Log _____

: Direct. Surv. _____

: _____

: Redrill _____

: Deepen _____

: Plug ✓: Alter Csg. ✓

: Abandon _____

7-6-53

DIVISION OF OIL AND GAS
UNION OIL COMPANYDIVISION OF OIL AND GAS
RECEIVED
CASING RECORD

WELL NO. 011 Operators #3

Long Beach

(FIELD)

Los Angeles

(COUNTY)

SEC. 13 T. 4-S R. 13-W S.B. B. & M.

History of Oil or Gas Well
REPAIR REPORT

Prod. Hoist - Contract

(TOOLS)

June 21, 1953

(PERIOD ENDING)

JUL 3 1953

LOS ANGELES, CALIFORNIA

See below

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS																																																							
	1953			CHARGE: B.R.-A.F.E. 51528 Job 231-0																																																							
				<u>PROPOSED WORK:</u> Plug back all existing perforations in R, S and T Zones and test well on production.																																																							
				<u>PRODUCTION BEFORE REPAIR:</u> 41 B/D Gross - 13 B/D Net - 22.8° - 67.3%.																																																							
				<u>ZERO POINT for this job:</u> 9'1"																																																							
				<u>CASING RECORD AT START OF WORK:</u> 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' F & C 5446' : Bad 4195' & 5107' WSO test on splice OK : Bullet pf 4190-4205', 5140-5180', 5190-5200', 5306-5355'.																																																							
				<u>CASING RECORD AT COMPLETION OF WORK:</u> 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' 4-5/8" C 3986' WSO : 226' 6-5/8" H 4995' F & C 5446' : Bad 4195' & 5107' : WSO test on splice OK : Bullet pf 4190-4205'. Bullet pf & plgd 5140-5180', 5190-5200', 5306-5355'.																																																							
1	6-8	5450	Plug 5428 Bad 5101	California Production Service, Contractor, moved in and installed blow-out preventer. Checked bottom with 2-5/8" Cavins sand pump at 5101'. Fluid level at 810'. Ran in with 7-1/2" impression block. Checked 5-1/2" liner hanger at 3925'. Ran in with 4" impression block - went to 5100' - no marks.																																																							
1	6-9	"	Plug 4983 Bad 5101	Ran in with Cavins continuous dump bottom bailer. Dumped 11 sacks of construction cement in 5-1/2" casing, starting at 5101'. Let stand 4 hours. Felt top of plug at 4983'.																																																							
1	6-10	"	Plug 4985	Ran in with 2-5/8" Cavins sand pump. Bailed loose cement at 4983' to hard cement at 4985'. Witnessed and approved by Division of Oil and Gas. Started running tubing.																																																							
1	6-11	"	Plug 4985	Ran tubing and started running rods.																																																							
1	6-12	"	" "	Finished running rods. Put well on pump. Contractor released.																																																							
				<u>PRODUCTION DATA</u>																																																							
				<table><tr><th>Hours</th><th>Gross</th><th>Net</th><th>Cut</th><th>Grav.</th></tr><tr><td>6-12</td><td>113</td><td>0</td><td>100.0</td><td></td></tr><tr><td>6-13</td><td>96</td><td>0</td><td>100.0</td><td></td></tr><tr><td>6-14</td><td>67</td><td>0</td><td>100.0</td><td></td></tr><tr><td>6-15</td><td>82</td><td>0</td><td>100.0</td><td></td></tr><tr><td>6-16</td><td>78</td><td>1</td><td>97.0</td><td>23.8</td></tr><tr><td>6-17</td><td>75</td><td>22</td><td>71.0</td><td>23.2</td></tr><tr><td>6-18</td><td>66</td><td>18</td><td>73.0</td><td></td></tr><tr><td>6-19</td><td>56</td><td>15</td><td>73.0</td><td></td></tr><tr><td>6-20</td><td>57</td><td>14</td><td>75.0</td><td></td></tr><tr><td>6-21</td><td>57</td><td>14</td><td>75.0</td><td></td></tr></table>	Hours	Gross	Net	Cut	Grav.	6-12	113	0	100.0		6-13	96	0	100.0		6-14	67	0	100.0		6-15	82	0	100.0		6-16	78	1	97.0	23.8	6-17	75	22	71.0	23.2	6-18	66	18	73.0		6-19	56	15	73.0		6-20	57	14	75.0		6-21	57	14	75.0	
Hours	Gross	Net	Cut	Grav.																																																							
6-12	113	0	100.0																																																								
6-13	96	0	100.0																																																								
6-14	67	0	100.0																																																								
6-15	82	0	100.0																																																								
6-16	78	1	97.0	23.8																																																							
6-17	75	22	71.0	23.2																																																							
6-18	66	18	73.0																																																								
6-19	56	15	73.0																																																								
6-20	57	14	75.0																																																								
6-21	57	14	75.0																																																								

NAMES OF DRILLERS/HEAD WELL PULLERS:

California Production Service, Contractor.

Chas. F. Bowden

DISTRICT ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 153-737

Los Angeles 15
Calif. June 18 19 53

Mr W S Eggleston
1109 Union Oil Building
LOS ANGELES 17
Calif.
Agent for UNION OIL CO OF CALIFORNIA

DEAR SIR:

Operations at your well No. "Oil Operators" 3 Sec. 13, T. 4 S, R. 13 W, S B B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
J. R. Thomas, Inspector, representative of the supervisor,
on June 10, 19 53. There was also present R. J. Wilson, Driller;
Ray Hothan, Helper.

Casing Record 13-3/8" cem. 765'; 8-5/8" cem. 3986'; W.S.O.: 5 1/2" 1d. 3928'-5446', perf. 4190'-4205', 5140'- 5180', 5190'-5200', and 5306'-5355'. T.D. 5450', plugged with cement 5446'-5428' and 5101'-4984'.	Junk None
--	-----------

The operations were performed for the purpose of testing the location and hardness of a cement plug placed from 5101' to 4984' in the process of plugging back.

The inspector arrived at the well at 10:45 a.m. and Mr. Wilson reported: that on June 9, 1953, 11 sacks of cement was dumped into the hole beginning at 5101'.

THE INSPECTOR NOTED THAT the bailer could not be spudded below 4984' and brought up a sample of set cement.

The test was completed at 11:30 a.m.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 4984' ARE APPROVED.

JRT:OH

cc Long Beach

Mr C F Bowden Div Engineer
Union Oil Co of California
9645 South Santa Fe Springs Road
WHITTIER California

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. Messer

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P 153-666

Los Angeles 15

Calif.

May 28

19 53

Mr. W S Eggleston

Los Angeles 17

Calif.

Agent for UNION OIL CO OF CALIFORNIA

DEAR SIR:

"Oil Operators"

Your proposal to plug & alter casing Well No. 3

Section 13, T. 4 S, R. 13 W, S B B. & M., Long Beach Field, Los Angeles County,

dated May 26 19 53, received May 27 19 53, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE

The hole is plugged with cement 5446'-5428'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth - 4076'
Deepen - 5450'

2. Complete casing record.

13-3/8" C 765'

8-5/8" C 3986' W.S.O.

~~1161-6 5/8" H 40751 line, 891 perf., pulled~~

1518' 5-1/2" F & C 5446', Bad 4195' & 5107'

W.S.O. test on splice O.K.

Bullet perf: 4190-4205, 5140-5180, 5190-5200, 5306-5355'

3. Last produced. April 1953 13 B/D 22.8 67.3%
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL

"The proposed work is as follows:

1. Plug 5-1/2" casing with cement from 5107' to 5000'.
2. Test on production.
3. Gun perforate 5-1/2" casing from 4950-4852'.
4. Test on production."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT

1. Plugging operations shall start from as deep as possible.
2. THIS DIVISION SHALL BE NOTIFIED TO WITNESS the location and hardness of cement plug at 5000'.

JLW:OH

cc W S Eggleston
C F Bowden
Long Beach

R. D. BUSH

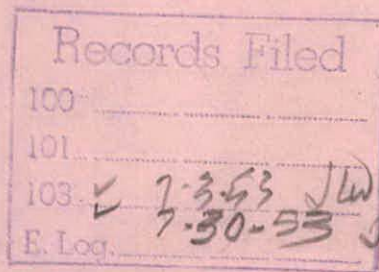
State Oil and Gas Supervisor

By

E. H. Meuser

Deputy

Blanket bond.



STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

MAY 27 1953

LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Whittier

Calif.

May 26

19 53

DIVISION OF OIL AND GAS

Los Angeles

Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling,~~ [&] plugging or altering casing at Well No. Oil Operators #3

(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S. B. B. & M.

Long Beach

Field,

Los Angeles

County.

The present condition of the well is as follows:

- Total depth. - 4076'
Deepen - 5450'
- Complete casing record.
13-3/8" C 765'
8-5/8" C 3986' W.S.O.
~~116-1-6-5/8" H 4075' inc. 891' perf. & pulled~~
1518' 5-1/2" F & C 5446', Bad 4195' & 5107'
W.S.O. test on splice O.K.
Bullet perf: 4190-4205, 5140-5180, 5190-5200, 5306-5355'

- Last produced. April 1953 13 B/D 22.8° 67.3%
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

- Plug 5-1/2" casing with cement from 5107' to 5000'.
- Test on production.
- Gun perforate 5-1/2" casing from 4950-4852'.
- Test on production.

Plug + alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS
				114 121

Blanket

UNION OIL CO. OF CALIFORNIA

(Name of Operator)

By

C. F. Bowden

C. F. BOWDEN, Division Engineer.

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STENOGRAPHER

Transcript in Kato Will

Date Received 7-29-48 Form 100 101 103

Elec. Log Radio Log

Direct.Surv. Other Data

Location

Elevation Steno. *Done*

ENGINEER

Q BOND *Blanket* Release Date Elig. 150b

End Prem.Yr. Release Requested Superseded Aban.

HOLD BOND Reason

Data Needed *None*

Final Letter Eng. *SHR*

8-2-48

STENOGRAPHER

Date Received 5-1-48 Form 100 101 103

Elec. Log _____ Radio Log _____

Direct. Surv. _____ Other Data _____

Location _____

Elevation _____ Steno. Scott

ENGINEER

BOND Blanker Release _____ Date Elig. _____ 150b _____

End Prem. Yr. _____ Release Requested _____ Superseded _____ Aban. _____

HOLD BOND _____ Reason _____

Data Needed TrueFinal Letter _____ Eng. SMR5-13-48

DIVISION OF OIL AND GAS

WELL NO. Oil Operators #3
Long Beach
(FIELD)
Los Angeles
(COUNTY)
13 4-S 13-N S.B.
SEC. 13 T. 4-S R. 13-N S.B. B. & M.UNION OIL COMPANY
History of Oil or Gas Well

REPAIR REPORT

Portable Hoist

(TOOLS)

February 24, 1948

13-3/8" CASING RECORD
8-5/8" C 3986' O.K.
1918' 5-1/2" C 5426'
(Fr. 5140-5180', 5190-5200',
5306-5355') Rigid with bridge plug
Perf. 4190-4205'.

(PERIOD ENDING)

(NOTE INEFFECTIVE CASING)

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS	FORMS		
	1948						
		Proposed work:		Plug off present perforation with temporary bridge plug. Test H-I Zone.	MAP BOOK CARDS BOND 121		
		Production:		November, 1947 8 B/D net - 23.0° - 64.1%	Sketches		
2	2-10	5450	Plg 5428	Rigged up. Pulled rods and tubing. Cleaned out from 5391' to 5428' with 3-1/8" Cavins bailer. Ran 4-1/2" impression block to 5426'.			
		"	"				
2	2-11	"	B.P. 4318	Set Baker bridge plug at 4327' - no fluid above plug. Dumped one sack cement at 4327'. Installed 6" control gate. Checked top of cement at 4318'. Dumped in 500 gallons of stove oil. Gun perforated 5-1/2" liner from 4190' to 4205' with two McCullough 1/2" holes per foot. Fluid level rose from 3918' to 3050' during shooting. Had a good gas blow.			
		"	"				
2	2-12	"	"	Located top of sand at 4283'. Cleaned out with 3-1/8" bailer to 4303'. Ran 4-1/2" impression block to 4210'. Ran 2-1/2" tubing to 4177'. Ran rods.			
		"	"				
1	2-13	"	"	Hooked up flow line. Put well on pump.			
				PRODUCTION DATA			
		Hours	Gross	Net	Cut	Gray.	Remarks
	2-14	24	44	19	56.0	23.0	Average Cut (old).
	2-15	24	19	8	56.0	23.0	
	2-16	24	10	4	56.0	23.0	
	2-17	24	17	7	56.0	23.0	
	2-18	24	14	6	56.0	23.0	
	2-19	0					Lowered tubing, changed pump.
	2-20	21	40	18	4.1	22.8	
	2-21	24	29	28	4.1	22.8	
	2-22	24	21	20	2.2	22.8	
	2-23	24	21	21	2.2	22.8	
	2-24	24	21	21	2.2	22.8	

DIVISION OF OIL AND GAS
RECEIVED
MAY 1 - 1948
LOS ANGELES, CALIFORNIA

NAMES OF DRILLERS/HEAD WELL PULLERS:

Santa Fe Springs Production

John R. Grasso

DISTRICT ENGINEER

DIVISION OF OIL AND GAS

UNION OIL COMPANY

History of Oil or Gas Well

REPAIR REPORT

Portable Hoist

(TOOLS)

April 15, 1948

(PERIOD ENDING)

CASING RECORD

13-3/8" C 765'

8-5/8" C 3986' O.K.

1518' 5-1/2" C 5446'

PT. 5140-5180, 5190-5200,

5306-5355' & 4190-4205'

(NOTE INEFFECTIVE CASING)

Oil Operators #3

WELL NO.

Long Beach

(FIELD)

Los Angeles

(COUNTY)

13 4-B 13-W S.B.

SEC. T. R. B. & M.

NO. TOURS	DATE	DEPTH	EFFECTIVE DEPTH	REMARKS
	1948			
				Proposed Work: Clean out bridge plug and return to production. Productions: 20 B/D net - 22.8° - 2.2°
1	3-24	5450	Plug 5428 Bridge plug 4318	Pulled rods and tubing. Shut well in.
1	3-25	5450	"	Cleaned out from 4308' to 4316' with 2-5/8" bailer. Fluid level 3100'.
2	3-26	5450	Plug 5428	Ran in with chisel shoe and drilled out bridge plug. Cleaned out with bailer to 5428'. Recovered metal and sand.
1	3-27	5450	Plug 5428	Checked hole open to bottom. Ran tubing and rods. Put well on production.
				PRODUCTION DATA
				Hrs. Gross Net Out Gray Remarks
	3-28			18 27 27 1.1 22.8
	3-29			18 30 30 1.1 22.8
	3-30			24 30 30 1.1 22.8
	3-31			24 48 47 1.1 22.8
	4-1			24 30 30 1.5 22.8
	4-2			
	4-3			Pulled rods and tubing. Cleaned out sand from 5368' to 5428' with 2-5/8" Cavins bailer. Ran tbg Ran rods & pump. Put well on prod.
	4-4			
	4-5			24 68 67 1.5 22.8
	4-6			24 68 67 1.5 22.8
	4-7			24 43 42 1.5 22.8
	4-8			24 4 4 1.5 22.8
	4-9			24 45 44 1.5 22.8
	4-10			24 33 33 1.5 22.8
	4-11			24 3 3 1.5 22.8
	4-12			24 2 2 1.5 22.8
	4-13			24 28 28 1.5 22.8
	4-14			24 40 39 1.5 22.8
	4-15			24 66 65 1.5 22.8
				MAP MAP B.O. CARDS BOND FORMS 114 121

NAMES OF DRILLERS/HEAD WELL PULLERS:

John R. Graser

DISTRICT ENGINEER

Hmin 32 C,

"Oil Operators" #3

Sol [redacted] [redacted] [redacted]

12/24/47

ABH.

To perf. 4205' - 4190'

later on if not enough to perf.

up as high as 4050'

To temp, bridge off lower perf.
and if o.k. to take both
zones together

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-44335

Los Angeles 15, Calif. December 26, 1947

Mr. W. S. Eggleston

Los Angeles 14, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your _____ proposal to alter casing Well No. "Oil Operators" 3,
Section 13, T. 4 S., R. 13 W., S. B. B. & M., Long Beach Field, Los Angeles County,
dated Dec. 22, 1947, received Dec. 23, 1947, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.

Total depth 5450' - Plug 5428'

13-3/8" C 765'

8-5/8" C 3986'

1518' 5-1/2" F & C 5446' Perf. 5140-5180', 5190-5200' & 5306-5355'

2. Last produced	<u>Nov., 1947</u>	<u>8 B/D Ave.</u>	<u>23.0°</u>	<u>64.1%</u>
	(Date)	(Net Oil)	(Gravity)	(Cut)"

PROPOSAL:

"The proposed work is as follows:

1. Plug off perforations from 5140' to 5355' with a bridge plug.
2. Test H-I Zones by stages from 4200' to 4050'.
3. If O.K., knock out bridge plug and put on production."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT

1. It is understood that the bridge plug above the perforations 5355'-5140', does not fulfill the requirements of this division for the abandonment of the lower portion of the hole.
2. This division shall be kept informed of the results of tests after each stage of perforating, and will designate any requirements at that time.

SHR:OH

cc- John R. Fraser
Long Beach



R. D. BUSH

State Oil and Gas Supervisor

By EA Muscare Deputy

Blanket bond.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
DEC 22 1947
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Whittier Calif. Dec. 22 19 47

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at well No. Oil Operators #3
(Cross out unnecessary words)

Sec. 13, T. 4-S, R. 13-W, S. B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.
Total depth 5450' - Plug 5428'
13-3/8" C 765'
8-5/8" C 3986'
1518' 5-1/2" F & C 5446' Perf. 5140-5180', 5190-5200' & 5306-5355'

2. Last produced Nov., 1947 8 B/D Ave. 23.0° 64.1%
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Plug off perforations from 5140' to 5355' with a bridge plug.
2. Test H-I Zones by stages from 4200' to 4050'.
3. If O.K., knock out bridge plug and put on production.

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			<i>Handbook</i>	<i>end</i>	<i>end</i>

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By John R. Fraser
John R. Fraser, Division Engineer

Address Notice to Division of Oil and Gas in District Where Well is Located

alter casing

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

5413
DIVISION OF OIL & GAS
RECEIVED
SEP 13 1941
LOS ANGELES, CALIFORNIA

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #3, Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated December 31, 1937

_____, was filed.
Date September 11, 1941 Title DIVISION ENGINEER
(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started; size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

CASING RECORD AT START OF WORK:

13-3/8" C. 765'
8-5/8" C. 3986', O.K.
116' 6-5/8" L. 4075', inc. 89' pf.

CASING RECORD AT END OF WORK:

13-3/8" C. 765'
8-5/8" C. 3986', O.K.
1518' 5 1/2" C. 5446'. Pf: 5140-5180'; 5190-5200';
5306-5355'

1941	Depth	Eff. Depth	Remarks
7-31	4076		Killed well with mud.
8-2	4080		Drilled through bottom of liner and ahead to 4080' with 5-5/8" bit. Cut 6-5/8" liner at 3976'.
8-3	4080		Recovered 18' 6-5/8" liner. Ran in double cup inverted 6-5/8" casing swab, changed from mud to oil, and washed perforations.
8-6	4170		Recovered remaining 98' of 6-5/8" liner, changed from oil to mud, and drilled ahead with 7-5/8" rock bit.
8-21	5131		Drilled ahead with 7-5/8" bits to 5131'. Hole was directionally controlled, using whipstocks at 4170', 4300', 4844', 4890', and 4977'. Ran Schlumberger survey.
8-25	5450		Continued drilling directionally controlled hole with 7-5/8" bits to 5450'. Coordinates of hole at 5449': 90.29' S., and 48.45' E. from the surface location of the hole. Ran Schlumberger survey. Ran in 1517.97' of new 5 1/2" Grade "C", 17# casing, including 83.44' new Grade "A", and 1.86' Burns 8-5/8"x5-1/2" liner hanger on top. Froze and cemented at 5446' with 285 sacks slow Colton cement.
8-29	5450	Plug 5428'	Found top of cement at 3685' and cleaned out cement to 5428'. Changed from mud to water and bailed fluid to 3011'. After standing 8 hours, found top of fluid at 3011', with no rise. Test was witnessed by D.O.G., and splice of liner approved. Changed from water to oil.

5446
1517.97
3929

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL & GAS
RECEIVED

SEP 13 1941

LOS ANGELES, CALIFORNIA

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Company of California FIELD Long Beach
Well No. Oil Operators #3, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated December 31, 1937, was filed.

SIGNED Henny E Winter

Date September 11, 1941

Title DIVISION ENGINEER
(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

1941	Depth	Eff. Depth	Remarks
8-31	5450	Plug 5428	Ran in Lane-Wells 4-3/8" casing gun perforator and perforated 5 1/2" casing from 5140-5180', 5190-5200', 5306-5355', with a total of 200 1/2" holes. Fluid level at surface during perforating.
9-1	5450	Plug 5428	Ran in rods and tubing and put well on the pump.

PRODUCTION DATA

	Gross	Net	Gravity	% Cut	Hours Pumped
9-1	145	123	22.3	15.5	12
9-2	141	107	22.3	24.2	24
9-3	129	110	22.3	15.0	24
9-4	117	105	22.3	10.5	24
9-5	129	116	22.3	9.9	24
9-6	122	110	22.3	9.9	24
9-7	119	109	22.3	8.7	24
9-8	113	104	22.3	8.4	24
9-9	114	104	23.1	8.4	23
9-10	99	90	23.1	8.6	24

MEASUREMENT DATUM

All measurements taken from top of rotary table, which is 22" above top of derrick floor. Top of derrick floor is 5' 1" above top of cement cellar, or 9' 1" above floor of cellar.

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
SEP 13 1941
LOS ANGELES, CALIFORNIA

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach
Well No. Oil Operators #3 Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

Henry E. Winter

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4076	4723	647'	Drilled		Sand and shale
4723	4732	9'	"		Sand with streaks of shale
4732	4959	227'	"		Sand and shale
4959	4967	8'	"		Shale
4967	5278	311'	"		Sand and shale
5278	5305	27'	"		Shale
5305	5450	145'	"		Sand and shale
		TOTAL DEPTH 5450'			

DIVISION OF OIL & GAS
RECEIVED
SEP 13 1941

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE No. 3 WELL
Sec. 13, T. 4-S, R. 11-W, S. B. B&M LOCATION ELEVATION

[illegible]

STATE CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No.

8976

DIVISION OF OIL AND GAS

LOS ANGELES

Calif.

9/10 1941

Name of Operator

Union Oil Co of Calif

Address

LOS ANGELES

This is to acknowledge the receipt of logs and similar records of wells on Sec.

13 T. 43

R. 13W. Long Beach B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work

See log - "Oil Operators" 3 8/21/41 - 8/21/41

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By

E. H. Mueser

Deputy



att

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-40031

Los Angeles, Calif. September 10, 1941.

Mr. W. S. Eggleston,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 3 Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
James T. Carriel, Inspector, representative of the supervisor,
on August 29, 1941. There was also present H. E. Winter, Engineer, and
J. Kewish, Drilling Foreman.

Casing Record 13-3/8" cem. 765'; 8-5/8" cem. 3986';	Junk None.
W.S.O.; 5-1/2" cem. 3928'-5446'; T.D. 5450', plugged	
with cement 5450'-5428'.	

The operations were performed for the purpose of demonstrating that no fluid has access to the well
between the 8-5/8" and 5-1/2" casings,

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 6:30 P. M. AND MR. WINTER REPORTED THE FOLLOWING:

1. All of the 6-5/8" casing was recovered.
2. A 7-5/8" rotary hole was drilled from 4075' to 5450'.
3. On August 25, 1941, 1518' of 5-1/2" - 17 lb. casing was cemented at 5446' with 285 sacks of Slow Colton cement.
4. Cement was drilled out of the 8-5/8" and 5-1/2" casings from 3685' to 3938' and from 5226' to 5428'.
5. On August 29, 1941, at 10:00 a. m., the fluid was bailed to 3011'.

THE INSPECTOR NOTED THE FOLLOWING:

1. No fluid entered the well while standing 8 hr. for test.
2. The hole was open to 5428'.

The test was completed at 7:20 p. m.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT NO FLUID HAS ACCESS TO
THE WELL BETWEEN THE 8-5/8" AND 5-1/2" CASINGS.

cc- H. E. Winter
Long Beach
JTC:OH

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Mussen Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P. 1-36673

Los Angeles,

Calif.

July 28

1941.

Mr. W. S. Eggleston,

Los Angeles,

Calif.

Agent for. UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your _____ proposal to deepen Well No. "OIL OPERATORS" 3,
 Section 13, T. 4S., R. 13W., S. B. B. & M., Long Beach Field, Los Angeles County,
 dated July 22, 1941, received July 24, 1941, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

Total depth 4076'

13-3/8" C 765'

8-5/8" C 3986' O. K.

116' 6-5/8" L 4075', inc. 89' perf.

Last production, June, 1941 - 764 oil, 9,521 water - 30 days.

It is desired to deepen to the "R-S" & "T" Zones."

PROPOSAL:

"The proposed work is as follows:

1. Pull 6-5/8" liner.
2. Deepen to approximately 5400 ft.
3. Cement solid 5-1/2" blank liner with top at approximately 3940 ft.
4. Test splice by Division of Oil & Gas.
5. Gun perforate "R-S" & "T" Zones as determined from electrical log.
6. Test on production."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be provided and ready for use at all times.
3. Any hole to be sidetracked in any oil zone shall be filled with cement, if possible.

cc- H. E. Winter

Long Beach

WJC:G

S/R.

R. D. BUSH

State Oil and Gas Supervisor

By

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JUL 24 1941
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well
This notice must be given fifteen days before work begins when possible

Santa Fe Springs Calif. July 22 19 41

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of deepening, ~~redrilling, plugging or altering casing~~ at well No. Oil Operators #3
(Cross out unnecessary words)

, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

Total depth 4076'
13-3/8" C 765'
8-5/8" C 3986' O.K.
116' 6-5/8" L 4075', inc. 89' perf.

Last production, June, 1941 - 764 oil, 9,521 water - 30 days
It is desired to deepen to the "R-S" & "T" Zones.

The proposed work is as follows:

1. Pull 6-5/8" liner.
2. Deepen to approximately 5400 ft.
3. Cement solid 5-1/2" blank liner with top at approximately 3940 ft.
4. Test splice by Division of Oil & Gas.
5. Gun perforate "R-S" & "T" Zones as determined from electrical log.
6. Test on production.

Deepen
REFERENCE TO THIS NOTICE

Shape	Model	Cross Section	Order	Notes

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By

Henry E Winter
Division Engineer.

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JAN 11 1938
LOS ANGELES, CALIFORNIA

Pete Rosander

LOG OF OIL OR GAS WELL

Operator UNION OIL COMPANY OF CALIFORNIA Field LONG BEACH
Well No. OIL OPERATORS 3 *Nelson 83* Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.
Location 982' N-W'ly along the center line of the Pacific Electric Railway right of way from the center line of Bixby Road, projected and thence 271' S-W'ly at right angles Elevation 53.88

In compliance with the provisions of Chapter 718, Statutes of 1915, as amended, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date Dec. 31, 1937 Signed *Henry E. Winter*
Title District Engineer
(Engineer or Geologist) (Superintendent) (President, Secretary or Agent)

Commenced drilling Nov. 5, 1937 Completed drilling Dec. 5, 1937 Drilling tools Cable Rotary
Total depth 4076 Plugged depth _____
Junk _____
GEOLOGICAL MARKERS DEPTH
Wilbur shale 3795-3658
Alamitos shale 3790-3834
"H" 3953
"I" 3987

Commenced producing Dec. 5, 1937 Flowing/gas lift/pumping (cross out unnecessary words)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	367	23.5	1.5			
Production after 30 days	279	23.5	1.4			

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Casing landed in	Number of Sacks of Cement	Depth of Cementing if through perforations
13-3/8	765	Surface	45.97#	New	Smls.	C	17"	350	
8-5/8	3986	Surface	36#	New	Smls	C	12-1/4"	400	
6-5/8	4075	3959	26#	New	Smls	C	7-5/8"	-	

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
6-5/8	3986 ft.	4075 ft.	120 mesh	16	6"	Kobe
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths Schlumberger from 765 to 4076 (Attach Copy of Log)

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR UNION OIL COMPANY OF CALIFORNIA FIELD LONG BEACH

Well No. OIL OPERATORS 3, Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

Signed Henry E. Winter

Date Dec. 31, 1937 Title District Engineer
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

CASING RECORD AT START OF WORK:

CASING RECORD AT END OF WORK:

New well

13-3/8" 765
8-5/8" 3986 O.K.
116' 8-5/8" 4075', inc. 89' perf.

1937	Depth	Bff. Depth	Remarks
11-6	55		Spudded in and drilled with 17" rotary bit.
11-9	765		Drilled with 17" rotary bits to 765. Cemented new 13-3/8" 45.97# National seamless slipjoint casing at 765' with 350 sx Victor H.B.S. treated cement. Cementing operations witnessed and approved by Murray-Aaron of Division of Oil & Gas.
11-10	932		Found top of cement at 761. Drilled out cement and plugs to 765' and drilled ahead with 12-1/4" bits.
11-24	3948		Drilled with 12-1/4" bits to 3930' and cored with 7-5/8" core barrels to 3948. Directional survey of hole made by Alexander Anderson.
11-25	4000		Cored ahead to 4000'. Ran Schlumberger survey. Reamed out core hole with 12-1/4" bit to 3986'.
11-25	4000		Cemented 8-5/8" 36# grade "C" 8-thread rounded seamless casing at 3986 with 400 sacks Victor oil well cement.
12-1	4030		Found top of cement at 3956'. Cleaned out cement and plugs to 3991. Water shut off test on 8-5/8" casing at 3986 witnessed and approved by Stolz of Division of Oil & Gas. Cored to 4030'.
12-3	4076		Cored to 4076. Ran Schlumberger survey. Landed 116' of 8-5/8" 26# Grade "C" 10-thread casing at 4075', including 89' of 120 mesh (16-2-6) Kobe perforated on bottom. Bailed fluid to 1200' when oil broke in.
12-5	4076		Bailed hole clean. Landed 3" upset tubing at 3710'. Ran rods and installed pumping unit. Well on pump 6:00 P.M. 12-5-37.

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR UNION OIL COMPANY OF CALIFORNIA FIELD LONG BEACH

Well No. OIL OPERATORS 3, Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

Signed Herry E. Winter

Date Dec. 31, 1937

Title District Engineer
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

PRODUCTION TEST DATA:

1937	Gross	Net	Grav.	Cut	Status	Remarks
12-5	215	159	23.5	26.0	P 11	
12-6	373	367	23.5	1.6	P 24	
12-7	310	307	23.5	1.1	P 24	
12-8	304	301	23.5	1.0	P 24	
12-9	308	305	23.5	1.0	P 24	
12-10	312	309	23.5	1.0	P 24	
12-11	311	308	23.5	1.0	P 24	
12-12	311	307	23.5	1.2	P 24	
12-13	284	282	23.5	0.7	P 24	
12-14	310	308	23.5	0.8	P 24	
12-15	296	293	23.5	1.0	P 24	
12-16	317	314	23.5	1.0	P 24	
12-17	307	304	23.5	1.0	P 24	
12-18	305	302	23.5	1.0	P 24	
12-19	302	299	23.5	1.0	P 24	
12-20	286	283	23.5	1.0	P 22	Changed gas line
12-21	282	279	23.5	1.0	P 24	
12-22	291	287	23.5	1.5	P 24	
12-23	295	291	23.5	1.5	P 24	
12-24	276	271	23.5	1.7	P 21	Working on gas engine
12-25	307	301	23.5	1.8	P 24	
12-26	246	242	23.5	1.5	P 20	Starting gas engine
12-27	263	279	23.5	1.4	P 24	

CORE RECORD

Long Beach FIELD Union Oil COMPANY Oil Operators LEASE #3 WELL LOCATION 53.88 ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
11-23-37	1	7-5/8 Sol1	3930	3948	17.8			10.8		Firm, medium to coarse gray sand. Inclusion of brown shale 0.3 from bottom. Dip - 13°. Hard sandy brown shale with fracture of 45°. Firm, medium to coarse gray sand with streaks of soft fine gray sand. Dip - 13°.		
						0.3		6.7				
						0.3		17.5				
11-25-37	2	7-5/8 Sol1	3948	3966	12.7					NOTE- Driller reported shell at 3951. 2.3' lost at top of core. Firm medium gray sand 0.5 Hard, calcareous shale shell. Firm to soft medium gray sand. Hard dark brown shale. Highly fractured in top 1.6'. Fracture of 60° 1.0' from bottom. Dip 15°-24°. Soft fine brown oil sand. Good odor. Hard brown sandy shale. Firm, soft fine brown oil sand. Fair odor and amber cut. Hard dark brown shale. Firm, soft fine brown oil sand. Fair odor and amber cut.		
						6.1		2.8				
						0.1						
						0.2		0.9				
						1.1		0.4				
						7.4	1.4	3.4	0.5			
11-25-37	3	7-5/8 Sol1	3966	3984	13.1	0.1				Hard, dark brown shale. Firm, soft fine brown oil sand. Poor odor and light amber cut. Hard dark brown shale Soft fine brown oil sand mixed with mud. Poor odor and light amber cut. Hard, dark brown shale with fractures of 25°. Top 0.4 highly fractured and contains streaks of fine brown oil sand. Streak of fine brown oil sand 0.4 from bottom. Firm fine brown oil sand. Fair odor and amber cut. Hard dark brown shale. Dip - 14°. Hard broken brown shale. Badly mixed with mud. Firm soft fine brown oil sand. Fair odor and amber cut. Hard broken brown shale with streaks of fine brown oil sand. Badly broken and mixed with mud. Hard dark brown shale.		
						0.3						
						0.1		0.5				
						3.3						
						0.4						
						2.5						
						1.8						
						0.2						
						3.1						
						0.8						
						11.7	1.4			NOTE-Driller reported shell at 3981.		

CORE RECORD

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

#3

WELL

LOCATION

53.88

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP.	ANGLE OF HOLE
11-25-37	4	7-5/8 Sol1	3984	4000	12.2	3.9	8.3			Hard compact massive dark brown to black shale. Slightly sandy in spots. Firm soft medium to coarse dark brown oil sand. Strong odor and dark amber cut. Sand looks good. Streak of brown shale at bottom.		
12-1-37	5	7-5/8 Sol1	4000	4015	10.1	3.9	8.3			Firm soft fine brown oil sand. Good odor.		
						0.4				Hard dark brown fractured shale. Dip = 22°.		
						1.1				Firm soft coarse brown oil sand. Good odor.		
						4.8				Firm soft fine brown oil sand. Good odor and dark amber cut.		
						0.2				Hard fractured brown shale. Dip = 16° with slickensides along dip.		
						2.8				Firm soft fine brown oil sand. Good odor and dark amber cut. Streak of brown bentonitic shale 0.3 from top.		
12-1-37	6	7-5/8 Sol1	4015	4030	6.7	0.6	9.5			Firm soft fine brown oil sand, poorly sorted top 1.0. Good odor and dark amber cut.		
						0.3				Firm, fine brown oil sand laminated with grayish-brown bentonitic shale.		
						0.4				Hard grayish-brown bentonitic shale. Change from oil sand and shale above is very gradational.		
						2.6				Firm, soft fine brown oil sand. Good odor and dark amber cut.		
						0.1				Hard brown shale.		
						1.0				Firm soft fine brown oil sand.		
						0.5	6.2					
12-2-37	7	7-5/8 Sol1	4030	4045	7.6	0.2	5.6			Hard brown shale. Dip = 17°		
						0.1				Firm soft fine to medium brown oil sand. Good odor and dark amber cut.		
						1.7				Hard grayish-brown bentonitic shale.		
						0.3	7.3			Firm soft medium brown oil sand. Good odor and dark amber cut.		

CORE RECORD

Long Beach

FIELD

Union Oil

COMPANY

Oil Operators

LEASE

#3

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
12-2-37	8	7-5/8 Soli	4045	4060	13.2			0.1		1.8 of mud and cavings with streak of fine gray sand 0.5 from top. Soft fine brown oil sand mixed with mud.		
						4.4	0.5			Hard brown shale with streaks and partings of fine brown oil sand.		
							0.4			Firm soft fine brown oil sand.		
						0.5	0.1			Hard brown shale with streaks of fine brown oil sand.		
							0.4			Firm soft fine brown oil sand.		
						0.2				Hard brown shale.		
							1.0			Firm soft fine brown oil sand.		
										Good odor and dark amber cut.		
						0.5				Hard brown shale.		
							0.9			Soft fine brown oil sand. Good odor		
						0.3				Hard brown shale. Fracture of 27°		
							0.3			Soft fine brown oil sand.		
						0.7				Hard brown shale. Dip - 19°		
							1.8			Soft fine brown oil sand. Good odor and dark amber cut.		
						0.2				Hard brown shale.		
							0.2			Soft fine brown oil sand mixed with mud.		
						0.2				Hard brown shale.		
						7.0	6.1	0.1				
12-2-37	9	7-5/8 Soli	4060	4076	12.3		2.5			Firm, soft fine brown oil sand. Good odor and dark amber cut.		
						1.6				Hard dark brown shale.		
									0.5	Hard slightly calcareous shale shell.		
						0.3				Hard silty dark brown shale.		
							0.2			Firm soft fine brown oil sand.		
						1.2	0.1			Hard silty dark brown shale, with streaks of fine brown oil sand.		
							0.3			Soft loose fine brown oil sand.		
						0.6	0.1			Hard dark brown silty shale with streaks of fine brown oil sand.		
							0.2			Firm soft fine brown oil sand.		
						0.7				Hard dark brown sandy shale with partings of fine brown oil sand. Poor dips 20°-26°.		
							0.6			Firm fine dark brown argillaceous oil sand.		
						0.2				Hard dark brown sandy shale.		
							1.9			Firm soft fine brown oil sand. Good odor and dark amber cut.		
						0.7				Hard dark brown sandy shale. Good dip of 28° with slickensides along dip		
										0.1 zone of black gouge between shale and sand above.		
							0.6			Soft loose fine brown oil sand.		
						5.3	6.5	0.5				
					TOTAL	DEPTH	-	4076				

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator Union Oil Company of California Field Long Beach

Well No. Oil Operators 3 Sec. 13, T. 4-S, R. 13-N, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

Henry E. Winter

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
0	125	125			Surface clay
125	140	15			Shale and boulders
140	350	210			Sand and shale
350	725	375			Hard sand
725	1058	333			Shale and sand
1058	2419	1361			Sand and streaks of shale
2419	2720	301			Sand and shale
2720	2768	48			Hard sand
2768	2888	120			Hard sand and streaks of shale
2888	2890	2			Shell
2890	2937	47			Hard sand and streaks of shale
2937	3592	655			Shale and streaks of sand
3592	3623	31			Hard sand
3623	3630	7			Shale and streaks of sand
3630	3653	23			Hard sand
3653	3765	112			Shale and streaks of sand
3765	3770	5			Hard sand
3770	3853	83			Sand and streaks of shale
3853	3864	1			Shell
3864	3864	10			Shale
3864	3866	2			Shell
3866	4076	210			Sand and streaks of shale (see core record)

STATE CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No. 7646

DIVISION OF OIL AND GAS

LOS ANGELES

Calif. 12/9 1937

Name of Operator Union Oil Co of Calif

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 4S
R. 13W - Long Beach, B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work see log - oil operators 3 - 12/2/37

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By E. H. Hargreaves

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

No. T 1-33469

Los Angeles, Calif. December 8, 1937.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your well No. "OIL OPERATORS" 3, Sec. 13, T. 4 S., R. 13 W., S. B. B. & M.,

Long Beach Field, in Los Angeles County, was tested for

shut-off of water on December 1, 1937. Mr. F. C. Stolz
Time and date

designated by the supervisor, was present as prescribed in Section 19, Chapter 718, Statutes 1915, as amended, and there were also present R. Rampton, Engineer, and

J. Kewish, Toolpusher.

Location of water tested above 3986' and normal fluid level not determined

Depth and manner { 3986 ft. of 8-5/8 in. 36 lb. } casing was { 11-26-37 } in shale
of water shut-off: { ft. of in. lb. } { shaded } Formation

at 3986 ft. with 400 sacks Victor oil well cement by casing method.

Water string was landed in 12 1/2" rotary hole.
Size, rotary or cable tool

Casing record of well 13-3/8" cem. 765'; 8-5/8" as above.

Reported total depth of hole 4000 ft. Hole bridged from xxx ft. to xxx ft. Hole cleaned out to 3991 ft. for this test.

At time of test depth of hole measured See below ft. and bailer brought up sample of xxxxx

At See below oil bailed to xxx ft., drilling fluid { bailed } to xxx ft.
Time and date { swabbed }

At " " top of oil found at xxx ft., top of fluid found at xxx ft.
Time and date

THE INSPECTOR ARRIVED AT THE WELL AT 8:30 A. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. No casing test was made.
2. 28' of set cement was drilled out of the 8-5/8" casing (equivalent to 8 sacks).
3. The Johnston tester was run into the hole on 4" drill pipe.
4. The wall packer was set at 3989'.
5. The tester valve was opened at 9:12 a. m. and remained open for 30 minutes. During this interval there was a medium blow of air for 6 minutes, a strong to medium blow of gas for 24 minutes.

THE INSPECTOR NOTED THE FOLLOWING:

1. When the drill pipe was removed 2700' of oil was found in the drill pipe above the tester, equivalent to 38 bbl.
2. The fluid sample taken from the bottom of the drill pipe tasted fresh.
3. The recording pressure bomb chart showed that the tester valve was open for 30 minutes.

The test was completed at 11:50 a. m.

THE SHUT-OFF IS APPROVED.

cc- H. E. Winter
Long Beach
FGS:OH

R. D. BUSH

State Oil and Gas Supervisor

By

E. Aguilar Deputy

629 South Hill Street
Los Angeles, California
November 24, 1937.

Union Oil Company of California,
Santa Fe Springs, Calif.

Gentlemen:

Attention Mr. Henry E. Winter

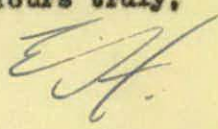
This will acknowledge receipt of and thank you
for your letter dated November 22, 1937, giving the correct
elevation and location of your well No. "Oil Operators" 3,
Sec. 13, T. 4 S., R. 13 W., S. B. B. & M., Long Beach field,
as follows:

Elevation: 53.88' U. S. G. S.

Location: 982 feet N.W. 'ly along the center
line of the Pacific Electric Railway Right of
Way from the center line of Bixby Road
projected and thence 271 ft. southwesterly
at right angles.

Our records have been corrected accordingly.

Yours truly,



B:EMS

CC - Mr. R. D. Bush (2)
Long Beach

Deputy Supervisor.

Corrections Made as Follows		By Whom
Weekly Summaries		
121		
Elev. and Loc. Cards		
Production Reports		
Well Records	Folders	
	Reports	
Peg Models		
Graphs		
Photo. Maps		

20 CFB

Book
CLB
11/24/37

Union Oil Company of California

PRODUCERS AND REFINERS OF
CRUDE OIL, FUEL OIL, ROAD OIL AND ASPHALT,
UNION GASOLINE, KEROSENE AND DISTILLATE,
'RED LINE' LUBRICATING OILS AND GREASES.

DIVISION OF OIL AND GAS
RECEIVED
NOV 24 1937
LOS ANGELES, CALIFORNIA

Santa Fe Springs, Calif. Nov. 22, 1937

Mr. E. Huguenin, Deputy Supv.,
Division of Oil & Gas,
Los Angeles, Calif.

Dear Sir:

The elevation of the Union Oil
Company well "Oil Operators #3" at Long Beach
(Sec. 13-4-13) is 53.88 U.S.G.S.

The corrected location is as
follows:

982 ft. N-W'ly along the center line
of the Pacific Electric Railway Right of
Way from the center line of Bixby Road
projected and thence 271 ft. Southwesterly
at right angles.

Our records have been corrected
accordingly.

Very truly yours,

Henry E. Winter
District Engineer.

HEW:S

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-33407

Los Angeles, Calif. November 29, 1937.

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 3 Sec. 13, T. 4 S., R. 13 W., S.B. B. & M.,

Long Beach Field, in Los Angeles County, were witnessed by

E. R. Murray-Aaron, representative of the supervisor,

on November 9, 1937. There was also present R. Rampton, Engineer, and

J. Kewish, Drilling Foreman.

Casing Record 13-3/8" cas. 765'; T.D. 765'. Junk XXXXX

The operations were performed for the purpose of demonstrating that the known surface waters are adequately protected,

and the data and conclusions are as follows:

THE INSPECTOR ARRIVED AT THE WELL AT 8:45 A. M. AND MR. RAMPTON REPORTED THE FOLLOWING:

1. A 17" rotary hole was drilled from the surface to 765'.
2. 770' of 13-3/8" - 45.97 lb. casing was run into the hole to 765'.

THE INSPECTOR NOTED THE FOLLOWING:

1. The 13-3/8" casing was cemented at the reported depth of 765' with 350 sacks of Victor High Early cement.
2. The final pressure was 500 lb.

The operations were completed at 9:30 a. m.

THE CEMENTING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT THE KNOWN SURFACE WATERS ARE ADEQUATELY PROTECTED.

cc- H. E. Winter
Long Beach
ERNA:OH

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Sullivan Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-31535

Los Angeles, Calif. November 4, 1937

Mr. Ed. Jussen, Jr.,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to drill Well No. "OIL OPERATORS" 3,
Section 13, T4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
dated Oct. 28, 1937, received Oct. 29, 1937, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"The well is 355 feet W'ly along the center line of San Antonio from the center line of Del Mar Ave. and thence 925' N'ly at right angles. 53.88 ft.
The elevation of the derrick floor above sea level will be determined later - approx. 55 ft.
We estimate that the first productive oil or gas sand should be encountered at a depth of about 4000 feet, more or less."

PROPOSAL:

"We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing	Weight	New or Second Hand	Depth	Landed or Cemented
13-3/8"	46	New	700'	Cmt'd.
8-5/8"	36	New	4000	Cmt'd.
6-5/8"	Perforated liner	New	4100'	Landed

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

- (a) Mud fluid of not less than 70 lb. per cubic foot shall be used in the drilling of the well and the column of mud fluid shall be maintained at all times to the surface, particularly while pulling the drill pipe.
(b) Adequate blow-out prevention equipment shall be provided and ready for operation at all times.
- Any hole to be sidetracked at any time during the drilling of this well shall be completely filled with cement.
- The formations to be left back of the 8-5/8" casing shall be mudded by open circulation until the loss is not more than 5 bbl. per hr.
- THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
(a) The cementing of the 13-3/8" surface casing.
(b) Final mudding operations before cementing the 8-5/8" casing.
(c) A test of the effectiveness of the 8-5/8" shut-off.

*982 feet N.W. 'ly along the center line of the Pacific Electric Railway
Right of Way from the center line of Bixby Road projected and thence
271 feet southwesterly at right angles. (Correction letter 11-24-37)

cc- H. E. Winter
Long Beach
WJC:OH

R. D. BUSH

State Oil and Gas Supervisor

By

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well
This notice must be given before drilling begins

RECEIVED
OCT 29 1937
LOS ANGELES, CALIFORNIA

037-06496

General Exploration Co.

Santa Fe Springs Cal. Oct. 28, 1937

Mr. E. HUGUENIN

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

Pi-31535

DEAR SIR:

"Oil Operators" 3

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of drilling well No. Oil Operators #3, Sec. 13, T. 4-S,

R. 13-W, S.B. B. & M., Long Beach Oil Field Los Angeles County.

Lease consists of 932 feet N.W. 1/4 along the center line of the Pacific Electric Railway Right of Way from the center line of Bixby Road projected and thence 271 feet, south-

The well is 355 W 1/4 along the center line of San Antonio from the center line of Del Mar feet N 68 E, and thence 925' N 1/4 at right

(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the derrick floor above sea level is Will be determined later - feet. approx. 55 ft.

westerly at right angles. (Correction letter 11-24-37)

We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing, Inches	Weight, Lb. Per Foot	New or Second Hand	Depth	Landed or Cemented
13-3/8"	46	New	700'	Cmtd.
8-5/8"	36	New	4000	Cmtd.
6-5/8"	Perforated liner	New	4100'	Landed

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing.

We estimate that the first productive oil or gas sand should be encountered at a depth of about 4000 feet, more or less.

Respectfully yours

Address Santa Fe Springs, Calif.

UNION OIL COMPANY OF CALIFORNIA

(Name of Company or Operator)

Telephone number Whittier 42687

By Henry E. Winters
District Engineer.

Reference to file of data

ADDRESS NOTICE TO DEPUTY STATE OIL AND GAS SUPERVISOR IN CHARGE OF DISTRICT WHERE WELL IS LOCATED

Wildcat Well
Topog. #54
SAR

Wildcat
Book
68B
10/29/37

Pacific Energy Resources Ltd.

"Oil Operators" 1

NW 1/4 8-1

Sec. 13-4S-13W.

LONG BEACH

937

3-3W

WEST LONG BEACH
Union Oil Co.
Oil Operators #1
UN No. C. 4-100

Casing shoe depth:

Driller

757 ft. Started run 5:45 p.m.

Schlumberger

757 ft. Finished run 8:00 p.m.

Bottom Depth: Driller

4041 ft. Time well occupied by outfit 2 1/4 h.

Max. depth reached by lower elect

4043 ft. Time waiting at well 0:45 h.

Max. footage measured (p or S. P.)

3286 ft. Mileage incurred by run 15 M.

Footage missed

-- ft. Total time incurred by run 4 h.

MUD CHARACTERISTICS

NATURE : natural VISCOSITY : 34 LEVEL :
DENSITY : 73 RESISTIVITY : 10 1/2

DIAMETER OF HOLE

12 1/4" to 4000 ft.

7-5/8" to 4041 ft.

REMARKS

Device: 20"

Witnessed By : Mr. Winter

OBSERVERS : J. WALSTROM

DEPTH

RESISTIVITY LOG

ohms. m²m

POROSITY LOG

millivolts

800

15

30

150 m.v.

900

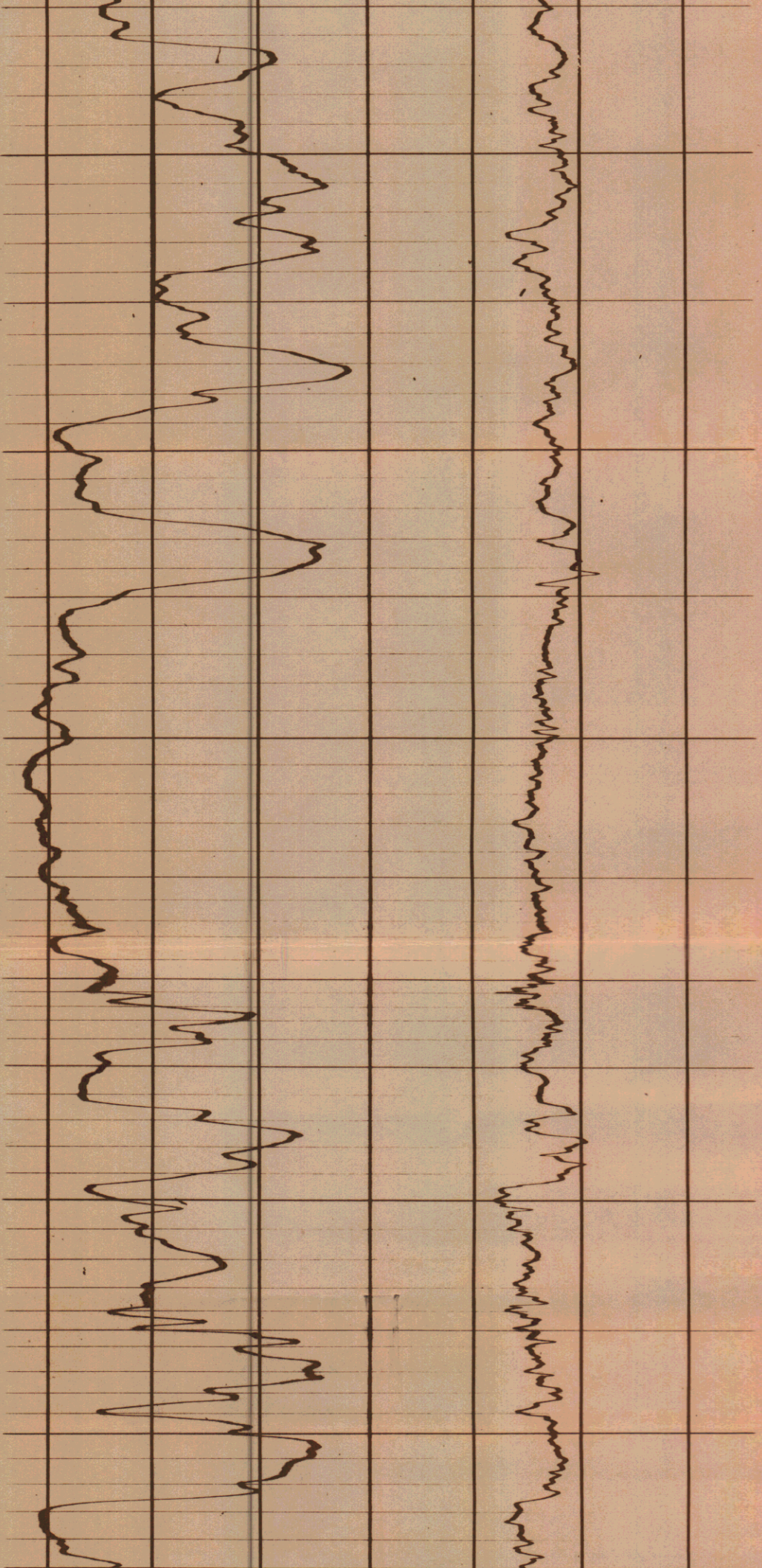
1000

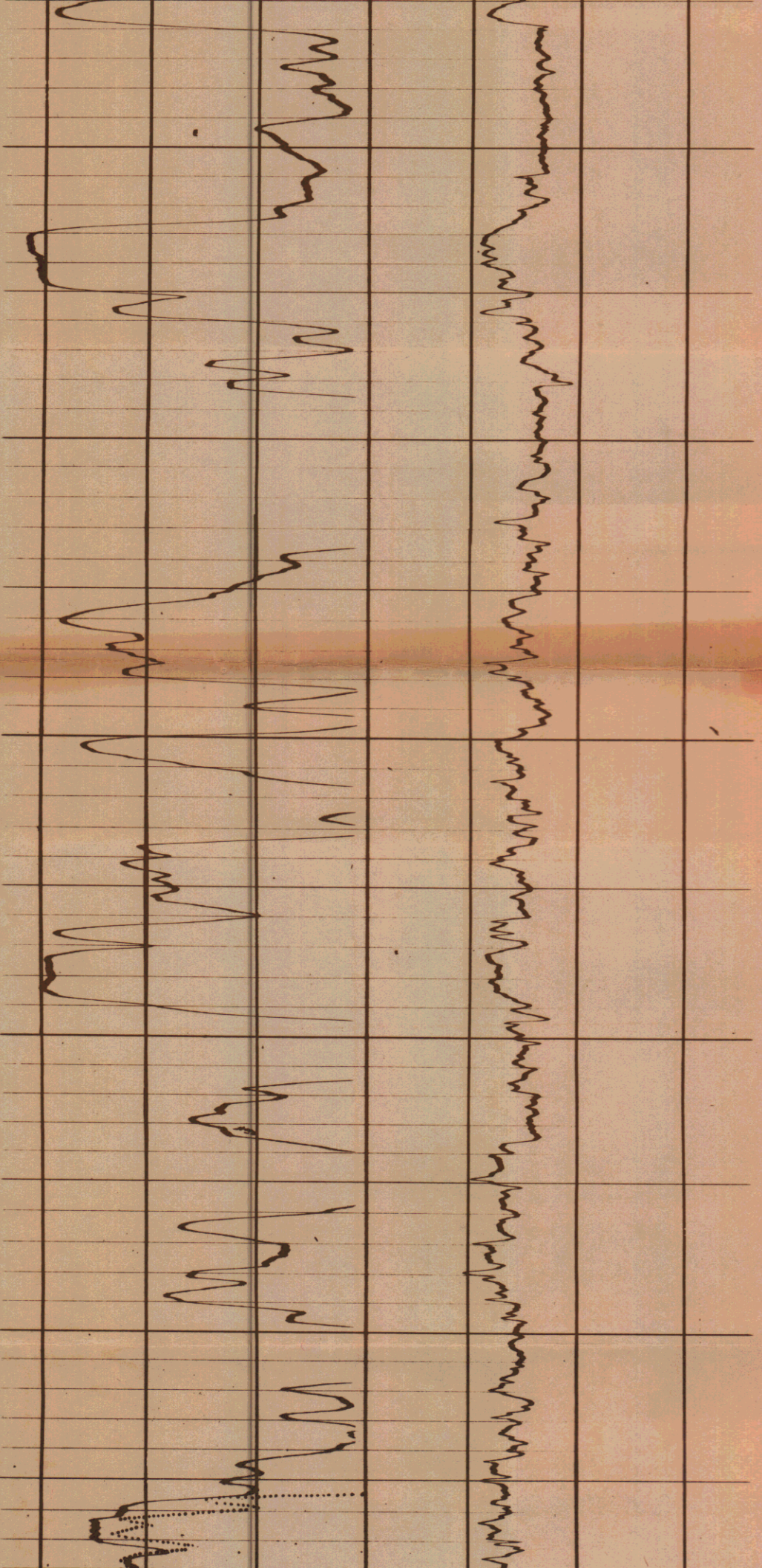
1100

1200

1300

1400





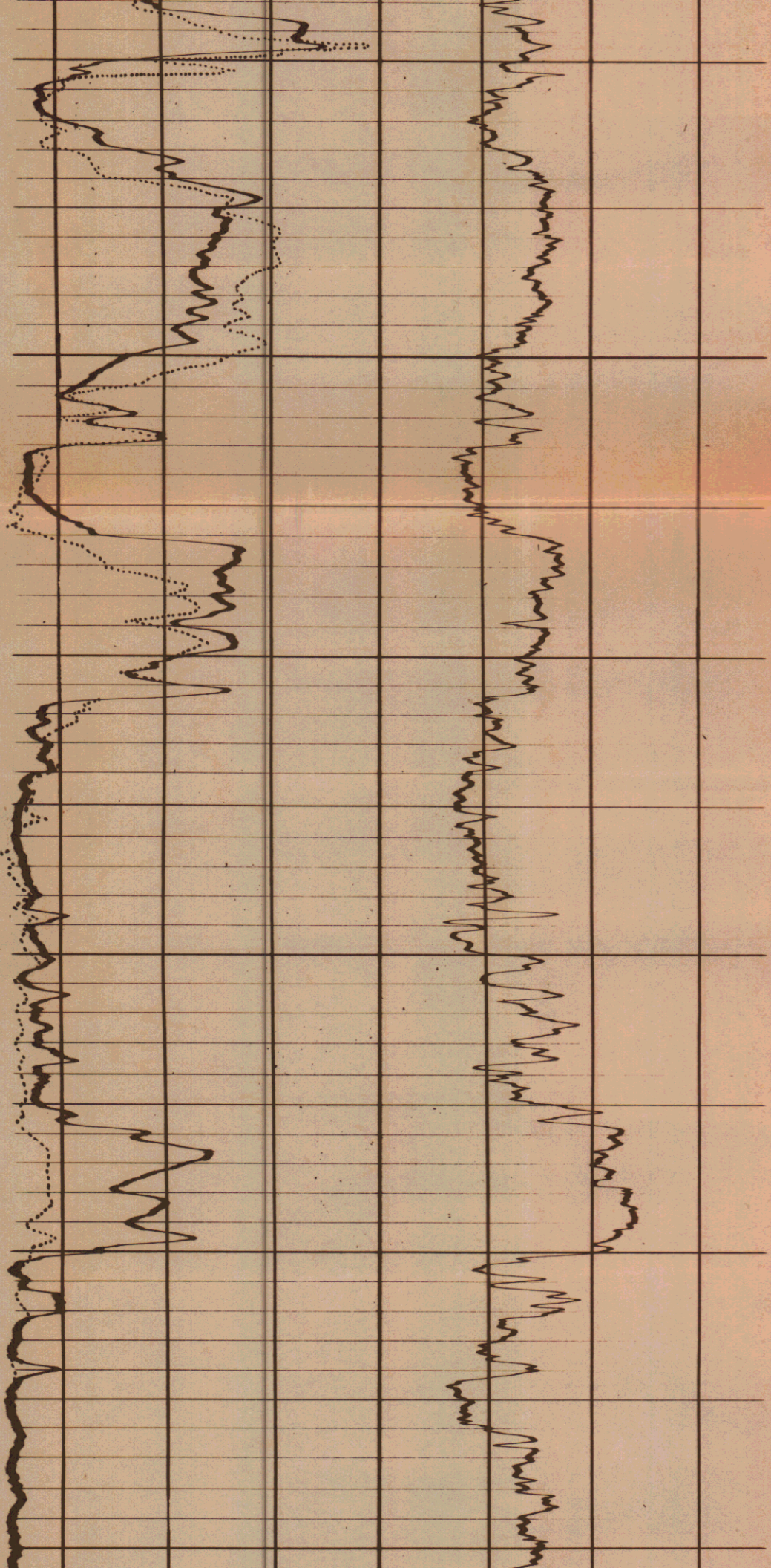
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1600

1700

1800

1900



2000

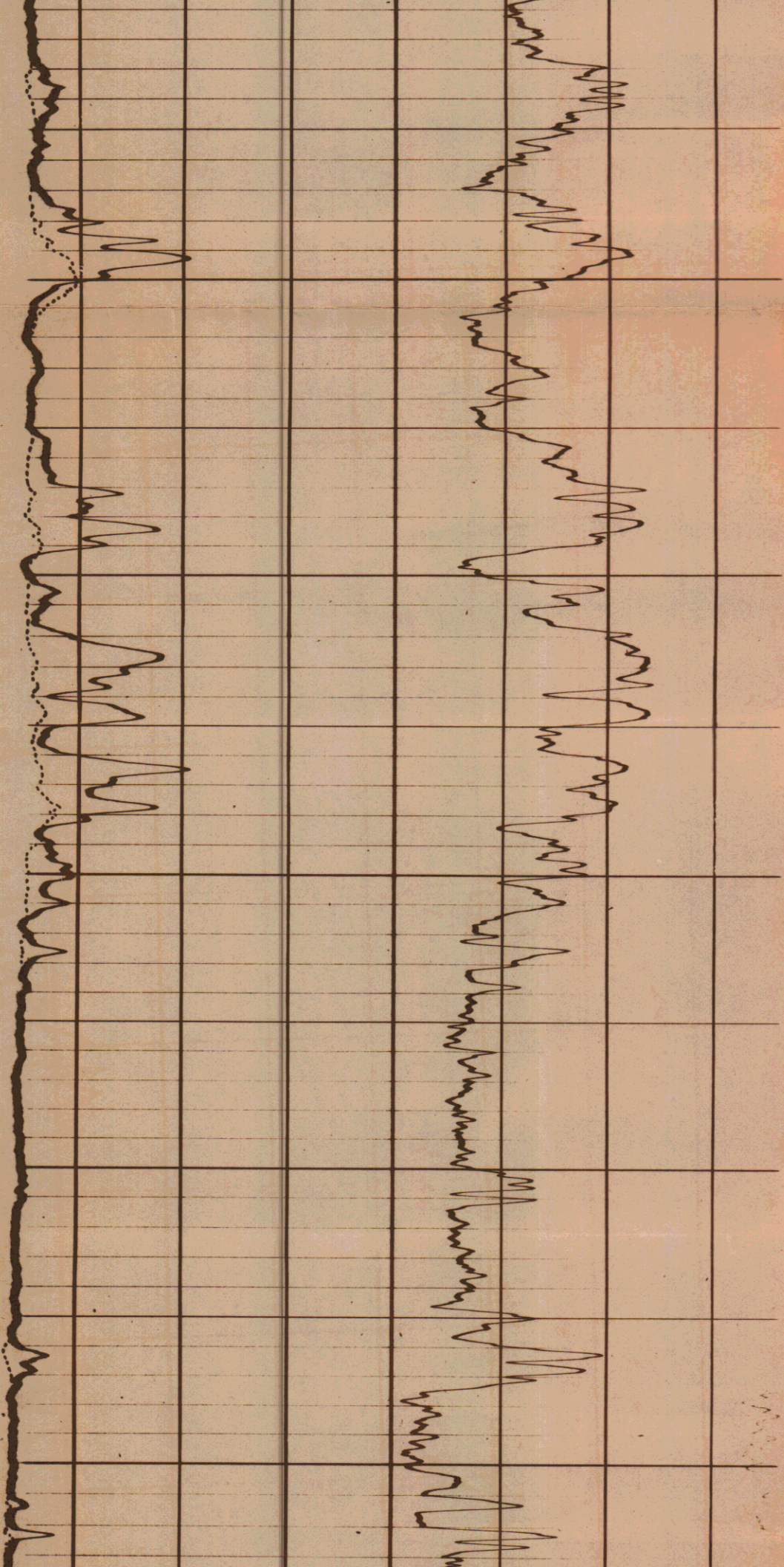
2100

2200

2300

2400

2500



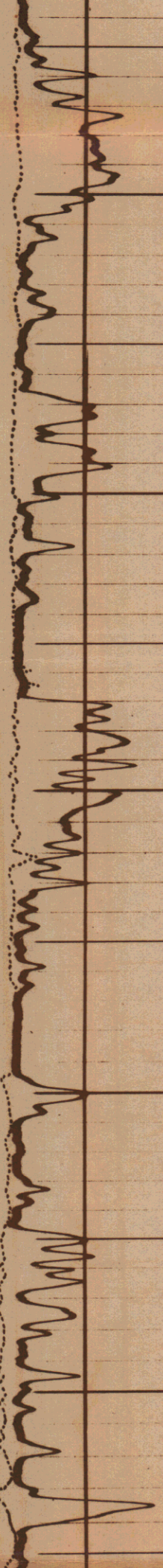
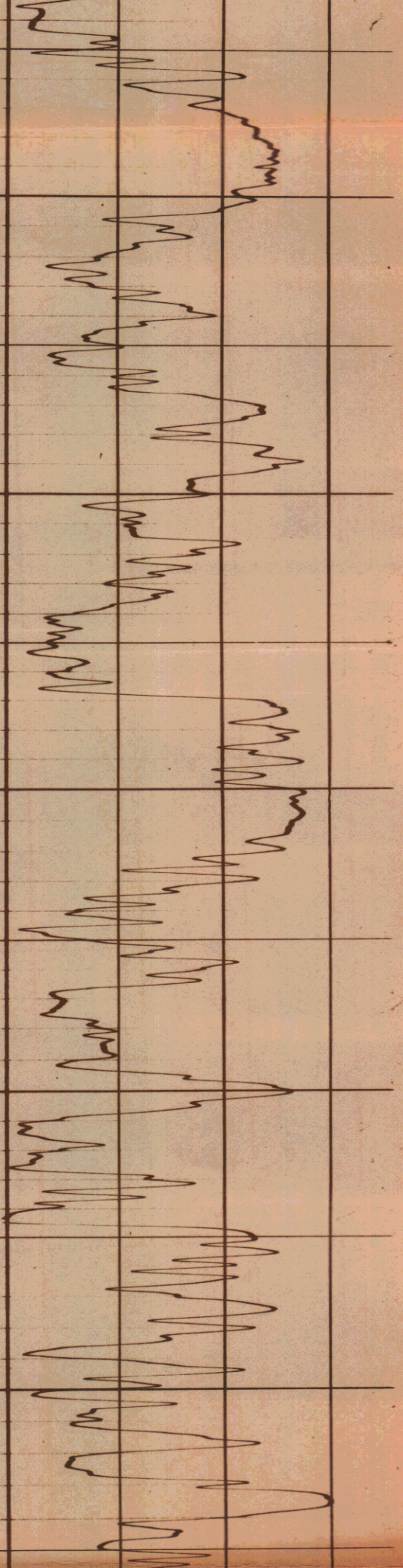
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2700

2800

2900

3000



3100

3200

3300

3400

3500

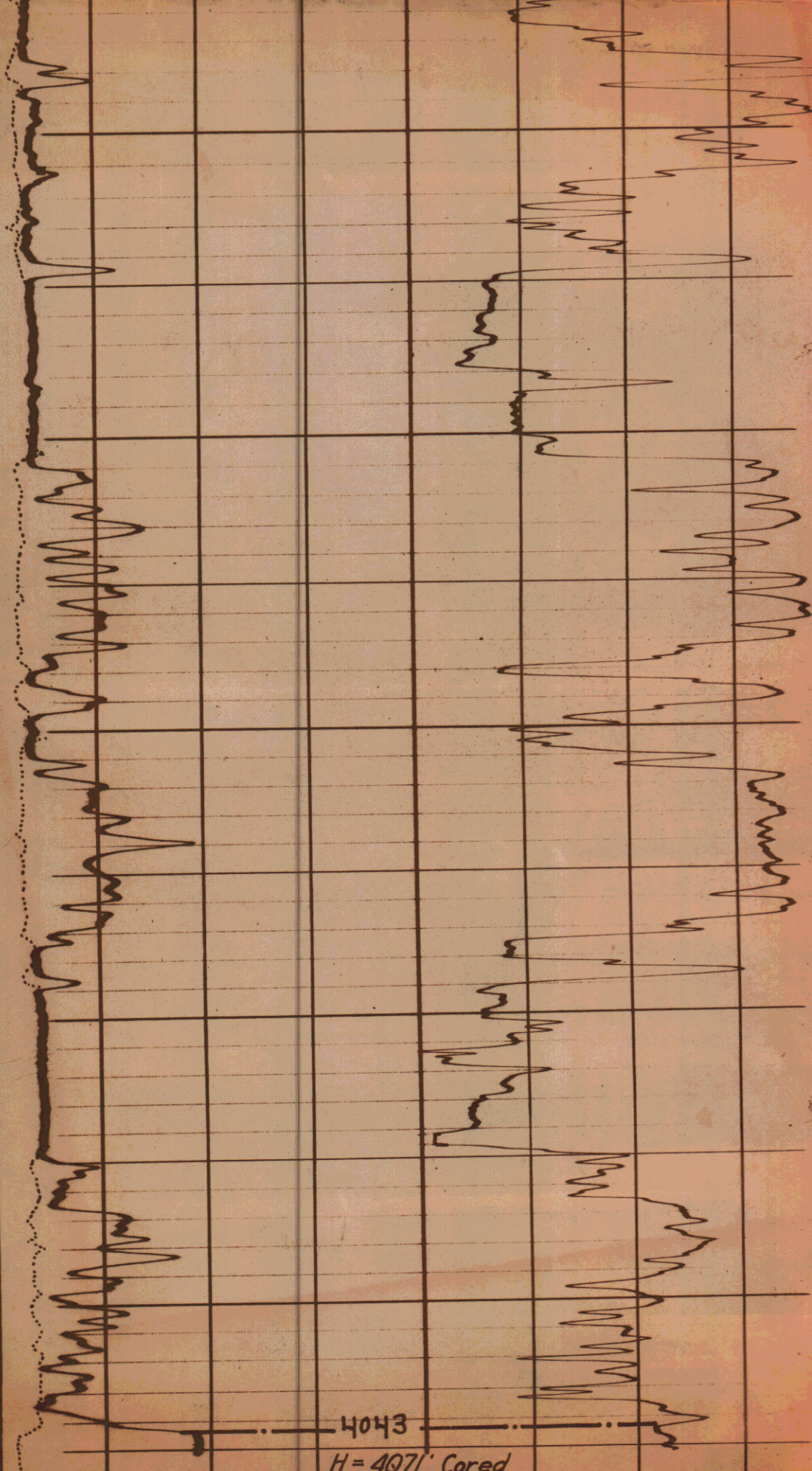
3600

3700

3800

3900

4000



Pacific Energy Resources Ltd.

R G E R

ATION

"Oil Operators" #1

NW 1/4 8-1

Sec. 13-4S-13W.

LONG BEACH

CC

IA

WELL: Oil Operators #1

RUN NO: Second

ELEVATION:

Sec 13-4S-13W

SMB

FIELD: Long Beach

COUNTY: Los Angeles

STATE: California

COMPANY: UNION OIL COMPANY
OF CALIFORNIA
FIELD: Long Beach
WELL: Oil Operators #1
COUNTY: Los Angeles
FILING NO: C-5-1493

Casing shoe depth:	{ Driller	4105 ft.	Started run	4:15 p.	m.
	{ Schlumberger	ft.	Finished run	5:45 p.	m.
Bottom Depth:	Driller	4532 ft.	Time well occupied by outfit	1	h.
Max. depth reached by lower elect		4532 ft.	Time waiting at well	1	h.
Footage measured		427 ft.	Mileage incurred by run	10	M.
Footage missed		1 ft.	Total time incurred by run	3	h.

DIAMETER OF HOLE

MUD CHARACTERISTICS

from to 4532' 7-5/8"
from to
from to
Bottom Temperature 126 °F

Nature: Natural
Weight: 72
Viscosity: 500 cc Marsh Funnel 32
Resistivity: 8.9 @ °F

REMARKS

Device: Long

Note: 60 Ohms scale attached at bottom

Depth measurements taken from: Top of rotary table

Maximum Pull 1800 lbs. at 4532 ft.

Witnessed By: Mr. Winter

DATE August 13, 1939

OBSERVERS V. T. FANT

RESISTIVITY

SELF-POTENTIAL

DEPTH

NORMAL CURVE THIRD CURVE

0 ohms m^2m 30

← 150 -millivolts →

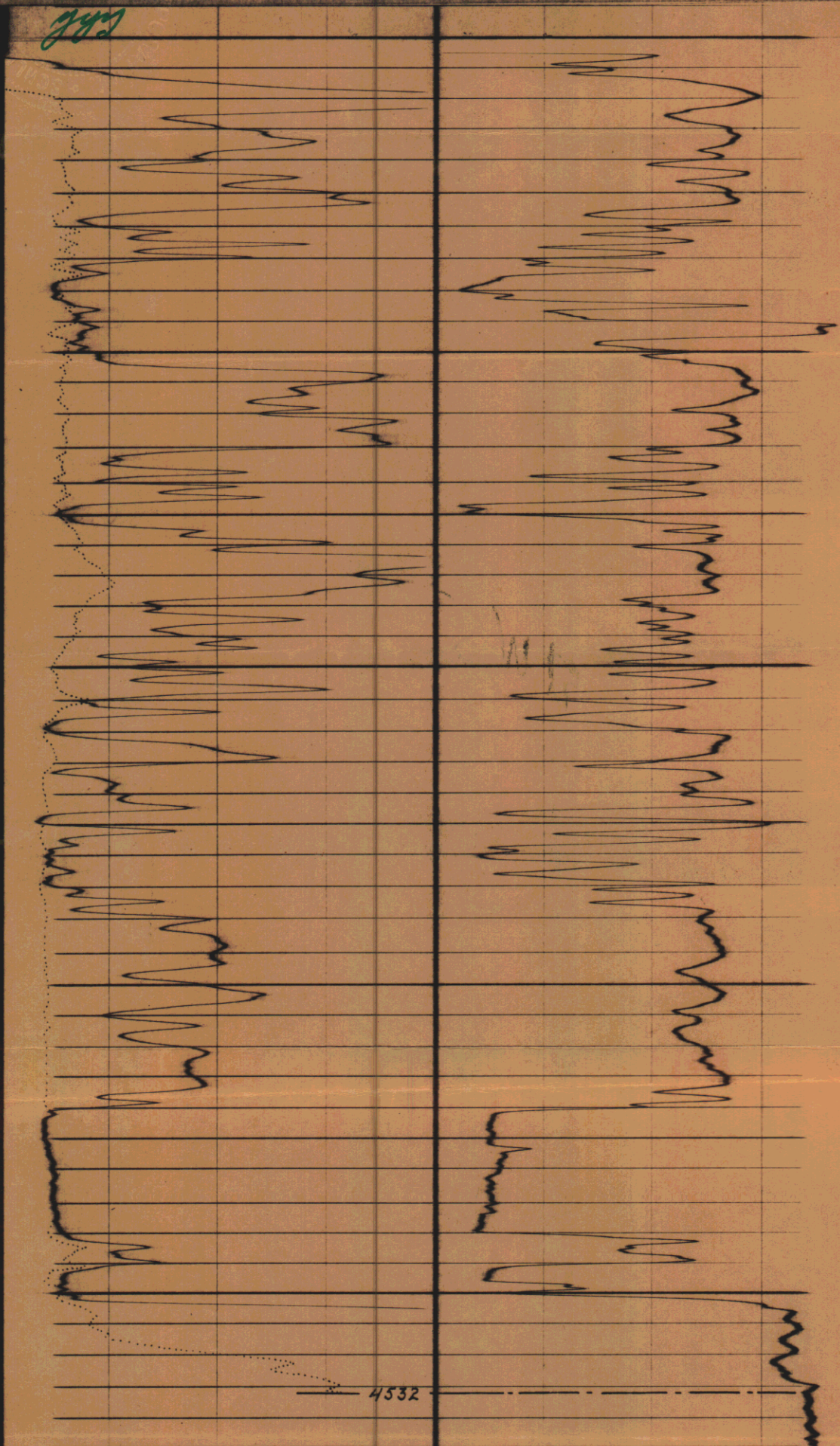
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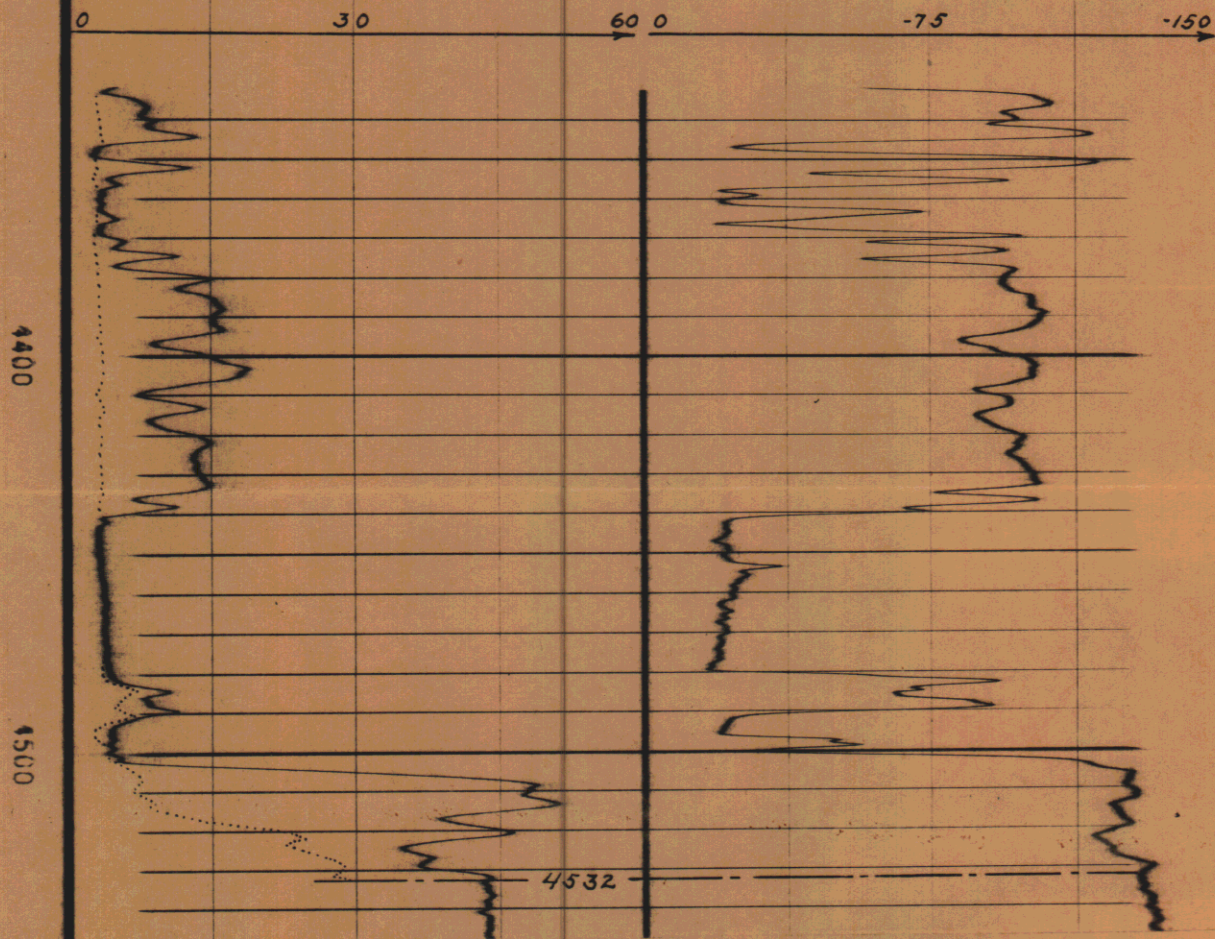
4200

4300

4400

4500





RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Wilmington, Long Beach, Montebello, Rosecrans, Rosecrans East, Torrance, and Newport West.			District One/Cypress				
Former owner Pacific Energy Resources			Operator code P0250		Date 7/10/2007		
Name and location of well(s) See Attachment							
Description of the land upon which the well(s) is (are) located See Attachment							
Date of transfer, sale, assignment, conveyance, or exchange 06/14/2007		New owner Pacific Energy Resources Ltd.		Operator code P0250			
		Address 111 West Ocean Blvd Long Beach, CA 90802			Type of organization Partnership		
					Telephone No. (562) 628-1526		
Reported by OG30A Both Signed							
Confirmed by							
New operator new status (status abbreviation) PA		Request designation of agent Darren Katic, Agent					
Old operator new status (status abbreviation) NPI		Remarks See Operator File					
OPERATOR STATUS ABBREVIATIONS		Deputy Supervisor R.K. Baker		Signature  Ken Carlson Associate Engineer			
PA – Producing Active		FORM AND RECORD CHECK LIST					
NPA – No Potential, Active		Form or record	Initials	Date	Form or record	Initials	Date
PI – Potential Inactive		Form OGD121			Map and book		
NPI – No Potential, Inactive		Form OGD140			Notice to be cancelled		
Ab – Abandoned or No More Wells		New well cards			Bond status	vm	7-11-07
		Well records			EDP files		
		Electric logs			Computer Files	vm	7-11-07
		Production reports					

WELL TRANSFER NOTICE

EFFEC MAY 9, 1994, PETRO RESOURCES, INC.
TRANS LONG BEACH NWLBU WELLS
TO PACIFIC ENERGY CORP.
SEE OGD156 DATED 5-13-94

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL PLUGGING AND ABANDONMENT

Long Beach, California

March 9, 1993

Joe D. Rose, Agent
PETRO RESOURCES, INC.
4200 Easton Dr., Suite 16
BAKERSFIELD CA 93309

Your report of the plugging and abandonment of well **NWLBU 8-1**, A.P.I. No. **037-09792**, Section **13**, T. **4S**, R. **13W**, S.B. **B. & M.**, Long Beach Field, Los Angeles County, dated **10-6-92**, received **10-7-92**, has been examined in conjunction with operations witnessed and records filed in this office. We have determined that all of the requirements of this Division have been fulfilled.

NOTE: Surface plugging completed on **7-3-92**.

William F. Guerard, Jr.
Acting State Oil and Gas Supervisor

By *R.K. Baker*
For R. K. Baker, Deputy Supervisor

KMCdf

cc: Update
Conservation Committee
L.A. County Assessor
L.A. County Fire Prevention Bureau
Don Callow, City of Signal Hill

DIVISION OF OIL AND GAS

CHECK

- RECORDS RECEIVED AND WELL

US

Company Petro Resources, Inc. Well No. NW6BU 8-1
 API No. 037-09792 Sec. 13, T. 4S, R. 13W, S.B. B.&M.
 County Sos Angeles Field Long Beach

RECORDS RECEIVED ¹⁰⁻⁶⁻⁹² DATE

Well Summary (Form OGI00) _____
 History (Form OGI03) 10/7/92 (2)
 Core Record (Form OGI01) _____
 Directional Survey _____
 Sidewall Samples _____
 Other _____
 Date final records received _____
 Electric logs: _____

STATUS

STATUS

Producing - Oil _____ Water Disposal _____
 Idle - Oil _____ Waterflood _____
 Abandoned - Oil ✓ Steamflood _____
 Drilling - Idle _____ Fire Flood _____
 Abandoned - Dry Hole _____ Air Injection _____
 Producing - Gas _____ Gas Injection _____
 Idle - Gas _____ CO₂ Injection _____
 Abandoned - Gas _____ LPG Injection _____
 Gas-Open to Oil Zone _____ Observation _____
 Gas Storage _____ Waterflood Source _____
 DATE _____ "E" well Yes ☐ No ☐

RECOMPLETED

REMARKS

ENGINEER'S CHECK LIST

1. Summary, History, & Core record (dupl.) ✓
2. Electric Log ✓
3. Operator's Name ✓
4. Signature ✓
5. Well Designation ✓
6. Location ✓
7. Elevation ✓
8. Notices ✓
9. "T" Reports ✓
10. Casing Record ✓
11. Plugs ✓
12. Surface Inspection ✓
13. Production _____
14. E Well on Prod., enter EDP _____
15. Directional Survey _____

CLERICAL CHECK LIST

1. Location change (F-OGD165) _____
2. Elevation change (F-OGD165) _____
3. Form OGD121 PL
4. Form OGI59 (Final Letter) 3/11/93
5. Form OGD150b (Release of Bond) _____
6. Duplicate logs to archives _____
7. Notice of Records due (F-OGD170) _____
8. EDP (F-OGD42A-1, 2) _____

Surf Insp. 2/14/92
6M

Final Letter

UPDATE CENTER 3-22-93

RECORDS NOT APPROVED

Reason: _____

RECORDS APPROVED Kan 2/11/93

RELEASE BOND

Date Eligible _____

(Use date last needed records were received.)

MAP AND MAP BOOK F.S.G.3-8-93

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Petro Resources, Inc. Field Long Beach County Los Angeles
Well NWLBU 8-1, Sec. 13, T 4S, R 13W, S.B.B. & M.
A.P.I. No. 037-09792 Name Joe D. Rose Title Manager
Date Oct. 6, 1992 (Person submitting report) (President, Secretary or Agent)

Signature 

4200 Easton #16, Bakersfield, Ca. 93309
(Address)

(805) 323-4118 or 323-6922
(Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1/31/84	Ran 3-3/4" bailor to 518'. Bailed pieces of wood. Ran 6-3/4" bit.
2/3/84-	
2/6/84	Drill and mill wood and steel to 558'. Ran I.B., appears to be angle iron in hole. (Mill worn down on outside 6" diameter).
6/2/92	MIRU Finley Oilwell Service.
6/3/92	7" I.B. to 551'. Mark on outside of 7". Ran in sawtooth on 2-7/8" to 551'. Ran 1-1/4" tubing to 551'. No go.
6/4/92	Pickup power swivel, spools for wellhead etc. Short day.
6/5/92	Ran 7-3/8" shoe and 1 ft. washover pipe. Wash 551-554'. Pull @ 25,000# to free string. No fish. 2' worn inprint inside shoe.
6/8/92	Ran 7" shoe with skirt drill 551-555'. Torque up, pull 32,000#, slipped off. Ran again to 554', won't go. Torqued up.
6/9/92	Ran 7-3/8" x 6-5/8" ID diamond friction shoe -- no catch. Diamond friction springs flattened. Ran 7-5/8" bit drill hard, torquing, getting wood and metal. Drill to 555'.
6/10/92	Ran piloted cone buster mill 554-556'. Torqued up. 7" I.B., no impression. Ran 6-3/4" junk mill, flat bottomed. Mill 556-557'. Ran I.B., indicated 6" OD metal tube looking up.
6/11/92	Ran 4-3/8" magnet. Recovered 2 gallons of metal pieces and wood. Bolt pieces, pipe fragments, etc. Ran 4-5/8" mill, mill to 558', Ran I.B. - indeterminate.
6/12/92	Ran 4-1/2" washover shoe, c.o. to 564'. POOH, recover 6' - 3-1/2" OD metal tube split and twisted w/ID of interior full of redwood pieces and splinters. Ran again, wouldn't go. Blanks off like we are inside of a core inside of wood.
6/15/92	Ran 4-9/16" junk mill, c.o. to 573'. Lots of wood and some metal shavings. Ran 7-5/8" 2 cone bit, c.o. to 575'. Wood and metal.
6/16/92	Ran 2 prong spear. Recover 3' of 1" drilling line. Re-run. Recover misc. wire pieces, metal and wood. Ran magnet, a gallon of pieces of metal.
6/17/92	Load out tools. Rig up 10-900 double gate BOP. Shoot 8- 1/2" holes 578-70'. RIH with Baker permanent cement retainer set at 537'. Pump away at 0-200 psi.
6/18/92	Pump 250 sx. cmt. through retainer and out perfs. Open valve between 8-5/8" and 13-3/8" casing and circulate. Spot 273 sx - pull out of the retainer and circulate 162 sx. inside 8-5/8" casing, filling the 8-5/8" from 578' to surface, and 250 sx. of cement pumped away down from 578' on the outside of the 8-5/8" casing. Total 685 sx. cement.
7/3/92	Cut off casing 8' below ground level and welded on metal cap. Both strings observed to be full of cement.

RECEIVED
92 OCT -7 PM 1:28
DIVISION OF OIL & GAS
LONG BEACH, CA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T 192-610

Report on Operations

Joe D. Rose, Agent
PETRO RESOURCES, INC.
4200 Easton Dr., Suite 16
BAKERSFIELD CA 93309

Long Beach Calif.
July 13, 1992

Your operations at well NWLBU 8-1, API No. 037-09792,
Sec. 13, T. 4S, R. 13W, S.B. B. & M. Long Beach
Field, in Los Angeles County,
were witnessed on 7-3-92 by J. Hebein, Engineer, representative of
the supervisor, was present from 1400 to 1405.
There were also present Dave Dahlman
Present condition of well: 13 3/8" cem 757'; 8 5/8" cem 4105', cp 570'; 6 5/8"
ld 4024'-4529', cp 4475'. Junk below 580'. TD 4532'. Bp 4200'. Plugged
w/cem 4529'-4443', 4200'-4124', w/523 sx cem below 535' & w/cem 535'-8'.

The operations were performed for the purpose of witnessing the plugging operations
in the process of abandonment.

DECISION:

APPROVED.

NOTE: The required Class II2M blowout prevention equipment
was inspected and approved on 6-18-92.

DEFICIENCIES: None.

CONTRACTOR: Finley Oil Well Service, Inc.

Surface Inspection Approved 7-14-92

JH:df

cc: Update
Callow, Signal Hill

K. P. Henderson, Acting Chief
State Oil and Gas Supervisor
By R. K. Baker
Deputy Supervisor
for R. K. Baker

6000
7-10-92

DIVISION OF OIL AND GAS
Cementing/Plugging Memo

192-610 10/10/92

Operator Petro Resources, Inc. Well No. NWLB 8-1
API No. 037-09792 Sec. 13, T. 4S, R. 13W, S.B. B&M
Field Long Beach, County Los Angeles, On 7/3/92
Mr./Ms. J. Hebein, representative of the supervisor, was present from 1400 to 1405.
There were also present Dave Dahlman, Pacific Energy Resources

Casing record of well: 13 3/8" cem 757'; 8 5/8" cem 4105', cp 370'; 6 5/8" id 4024'
4529', cp 4475'. Junk below 580'. TD 4532'. Bp 4200'. Plugged w/cem
4529'-4443', 4200'-4124', w/523SX of cem below 535' + w/cem 535'-8'.

The operations were performed for the purpose of (L)

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' is approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed	Final	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing	Away	Press.	
				6/18/92	Ret. @ 535'		returned	6'	523SX	300	8 1/2" holes @ 570'

BLD 264/m @ 200 psi.

Casing/tubing recovered: _____" shot/cut at _____', _____', _____' pulled fr. _____';
_____ " shot/cut at _____', _____', _____' pulled fr. _____'.

Junk (in hole): below 580'

Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.

- NOTE (K) JIM 6/18/92

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
6/18/92	162 Sx 523 Sx	Ret. @ 535'	0900	M. Saw	8' *	visual	7/3/92 1403	J. Hebein

C/O 580', bnd csg @ 551'

* plate welded on 20" conductor

DEFICIENCIES NOTED AND CORRECTED:

None

DEFICIENCIES NOTED AND TO BE CORRECTED:

None

UNCORRECTABLE DEFICIENCIES:

None

CONTRACTOR:

Finlay Oil Well Service, Inc.

T

Operator Peto Resources, Inc. Well NW/4BU 8-1
Field Long Beach County L.A. Spud Date _____
VISITS: Date 6/18/92 Engineer M. Saw Time 0850 to 0900 Operator's Rep. J. Moyers Title R.F.
1st _____ (_____ to _____) _____
2nd _____ (_____ to _____) _____
Contractor _____ Rig # _____ Contractor's Rep. & Title _____
Casing record of well: _____

DECISION: The blowout prevention equipment and its installation on the _____ " casing are approved.

**REQUIRED
BOPE CLASS:**

OGD9 (12/90/GSR1/2M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 192-651

412
(field code)
03
(area code)

(new pool code)
00
(old pool code)

PERMIT TO CONDUCT WELL OPERATIONS

Joe D. Rose
PETRO RESOURCES, INC.
4200 Easton Dr., Suite 16
BAKERSFIELD CA 93309

Long Beach, California
June 16, 1992

Your proposal to abandon well NWLBU 8-1,
A.P.I. No. 037-09792, Section 13, T. 4S, R. 13W, S.B. B. & M.,
Wilmington field, Northwest Extension area, --- pool,
Los Angeles County, dated 6-12-92, received 6-15-92, has been examined in conjunction with records
filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, equivalent to this division's Class II2M requirements, or better, shall be installed and maintained in operating condition.
2. All portions of the hole not plugged with cement shall be filled with clay base mud having a minimum density of 72 lb/cu ft and a minimum gel-shear strength of 25 lb/100 sq ft.
3. This division shall be consulted and a Supplementary Notice may be required before making any changes in the proposed program.
4. THIS DIVISION SHALL BE NOTIFIED TO:
 - a. Witness the clean-out depth.
 - b. Witness the placing, location and hardness of the cement plug from 550' to 5' inside and outside the 8 5/8" casing.
 - c. Inspect and approve the cleanup of the well site.

NOTES:

1. A crew drill may be required at the time of the blowout prevention equipment inspection.
2. The proposed surface plug shall not contain rock or gravel.
3. The base of the freshwater sands is at 2100'±.
4. Report on Operations (OG 109) (T-Report) and Report of Well Abandonment (OG 159) will not be released until all records and histories are on file with this Division.
5. This Division does not recommend building over or in proximity of this well.

KMC:ss

cc: Update
Don C. Callow, City of Signal Hill

BLANKET BOND

Engineer Kenneth M. Carlson

Phone (310) 590-5311

K.P. HENDERSON, Acting Chief

By R.K. Baker
For R.K. Baker, Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

06

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Abandon Well

This notice must be given at least five days before work is to begin.

DIVISION OF OIL AND GAS

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS	
		114	121
6/12/92	BB 6/12/92	6/12/92	6/12/92

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon Well No. NWLBU 8-1, API No. 037-09792,
Sec. 13, T. 4S, R. 13W, S.B. B. & M., Long Beach Field, Los Angeles County,
commencing work on June 15, 1992.

The present condition of the well is:

1. Total depth: 4532', junk @ 551'
2. Complete casing record, including plugs and perforations:
13-3/8" csg. cmtd. @ 757'
8-5/8" csg. cmtd. @ 4105'
6-5/8" 4024-4529', cp @ 4475'.
PB 4520-4443', BP @ 4200'. Cmt. plug
4200-4124'.

3. Last produced N-A
(Date) (Oil, B/D) (Gas, Mcf/D) (Water, B/D)
or
4. Last injected Never
(Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths)

5. Oil or gas shows

6. Stratigraphic markers:

7. Formation and age at total depth:

8. Base of fresh water sands: 2100'

The proposed work is as follows:

1. Perforate 8 - 1/2" holes at 550'.
2. Set cement retainer at 500', squeeze 250 sxs. through retainer to squeeze below shoe of 13-3/8" surface casing.
3. Perforate 8- 1/2" holes at 480'. Establish circulation between 8-5/8" and 13-3/8" casings. Circulate cement leaving 8-5/8" and annulus between 8-5/8" & 13-3/8" full of cement - use 500 sx. cmt.
4. Cut off casing strings 6' below ground level and level site.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 4200 Easton #16
Bakersfield, Ca. (Street) 93309
(City) (State) (Zip)
Telephone Number (805) 323-4118

Petro Resources, Inc.
(Name of Operator)
By Joe D. Rose 6-12-92
(Name) (Date)
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

~~From~~

Jan Hurst N

(310) ~~595 0310~~ Fax
Return Vern Rice
NWCB 8/1/88



VERN RICE

PRODUCTION
SUPERINTENDENT

Mailing Address
P.O. Box 92527
Long Beach, CA 90809-2527

2945 Junipero Ave.
Signal Hill, CA
(213) 595-4505

RECEIVED
92 JUN 15 PM 1:35
DIVISION OF OIL & GAS
LONG BEACH, CA

TO <i>Ken</i>		ROOM/STA. NO.
FROM <i>Vern</i>		ROOM/STA. NO.
REPRESENTING <i>(310)</i>		
DATE <i>6-16</i>	TIME <i>11:45</i>	PHONE ATSS ☐ <i>595-4505</i>
☐ Telephoned	☐ Please call	☐ Was In
☐ Returned Call	☐ Will Call Again	☐ Wants To See You
☐ Information	NOTE and	REPLY
☐ Comment	☐ Re-route	☐ My Signature
☐ Investigate	☐ Return	☐ Copy Me
☐ Contact Me	☐ File	☐ Forwarded Per Request
MESSAGE/REMARKS <i>Did you fax the notice yet?</i>		
BY <i>FAX (310) 595-0310</i>		

STATE OF CALIFORNIA
MESSAGE
STD 7 (REV 1/90)

89 54047

PROTECT YOUR
INFORMATION ASSETS

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Abandon Well

This notice must be given at least five days before work is to begin.

DIVISION OF OIL AND GAS

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS	
		114	121
6/12/92	BB 6/12/92	6/12/92	6/12/92

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon Well No. NWLBU 8-1, API No. 037-09792,
 Sec. 13, T. 4S, R. 13W, S.B. B. & M., Long Beach Field, Los Angeles County,
 commencing work on June 15, 1992

The present condition of the well is:

- Total depth: 4532', junk @ 551' ^{560'}
- Complete casing record, including plugs and perforations:
 13-3/8" csg. cmtd. @ 757'
 8-5/8" csg. cmtd. @ 4105'
 6-5/8" 4024-4529', cp @ 4475'.
 PB 4520-4443', BP @ 4200'. Cmt. plug
 4200-4124'.

3. Last produced N-A
 (Date) (Oil, B/D) (Gas, Mcf/D) (Water, B/D)

or

4. Last injected Never
 (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths)

5. Oil or gas shows

6. Stratigraphic markers:

7. Formation and age at total depth:

8. Base of fresh water sands: 2100'

The proposed work is as follows:

- Perforate 8 - 1/2" holes at 550'.
- Set cement retainer at 500', squeeze 250 sxs. through retainer to squeeze below shoe of 13-3/8" surface casing.
- Perforate 8- 1/2" holes at 480'. Establish circulation between 8-5/8" and 13-3/8" casings. Circulate cement leaving 8-5/8" and annulus between 8-5/8" & 13-3/8" full of cement - use 500 sx. cmt.
- Cut off casing strings 6' below ground level and level site.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 4200 Easton #16
Bakersfield, Ca. ^(Street) 93309
 (City) (State) (Zip)

Telephone Number (805) 323-4118

Petro Resources, Inc.
 (Name of Operator)
 By JDR 6-12-92
Joe D. Rose (Date)
 Type of Organization Corporation
 (Corporation, Partnership, Individual, etc.)

Facsimile Transmission Cover Sheet

Receiving FAX telephone : 310/590/5301

1 more page follows this cover page

Sent by :

JOE ROSE

PETRO RESOURCES INC
4200 EASTON DR #16
BAKERSFIELD, , CA 93309

FAX Telephone : 805/323/8567
Voice Telephone : 805/323/4118

In case of trouble, contact : 805 323 4118

Sent on 06-12-1992 at 10:56

RECEIVED

92 JUN 12 AM 11:01

DIVISION OF OIL & GAS
LONG BEACH, CA

sent on 06-13-1993 at 10:22

in case of trouble, contact : 802 333 4118

voice telephone : 802\333\4118
FAX telephone : 802\333\8221

BAKERSTFIELD CV 83308
4300 EYALON DR #10
BELKO RESOURCES INC

JOE ROSE

sent by :

I note below follows the cover page

receiving FAX telephone : 310\280\2301

TO : KEN CARSON DIVISION OF OGC

Enclosure Transmission Cover Sheet

BELKO RESOURCES INC

PETRO RESOURCES INC

Facsimile Transmission Cover Sheet

~~TO : KEN CARLSON~~ ~~DIVISION OF O&G~~

Receiving FAX telephone : 310/590/5301

1 more page follows this cover page

Sent by :

JOE ROSE

PETRO RESOURCES INC
4200 EASTON DR #16
BAKERSFIELD, , CA 93309

FAX Telephone : 805/323/8567
Voice Telephone : 805/323/4118

In case of trouble, contact : 805 323 4118

Sent on 06-12-1992 at 10:56

RECEIVED

92 JUN 12 AM 11:01

DIVISION OF OIL & GAS
LONG BEACH, CA

sent on 06-13-1992 at 10:29

in case of trouble contact : 802 333 4118

AOTCE telephone : 802\333\4118

LUX telephone : 802\333\8201

BAKERFIELD CA 93300

4300 EUSTON DR #1P

BETKO RESOURCES INC

JOE BOBE

sent by :

I will have someone call you back

regarding LUX telephone : 310\220\2301

TO : KEN CARLSON DIVISION OF OGC

Facsimile Transmission Cover Sheet

BETKO RESOURCES INC

Petro Resources, Inc
NWCBU 8-1 (037-09792)

13 3/8 8 5/8"

757'

Junk @ 560'

6 5/8"

4028'

4105'

cem

4124'

BP @ 4200'

CP

4529'

TD 4532'

1 Petro Resources Inc.
 East Shore 6-2-92 thru 6-18-92 NWLB 8-1

		Daily	Accum.
John M Phillips Co. :	12-900 X 8-900 X-OVER SPOOL	20. ⁰⁰	180. ⁰⁰
	8-900 PGSR	25. ⁰⁰	225. ⁰⁰
	1 EA 3 1/2 IF ^P Lifter	15.-5.	30. ⁰⁰
	1 SET 4 1/2" TONG JAWS	45.-45.	135. ⁰⁰
	1 SET 4 1/2" SLIP INSERTS	20.-20.	60. ⁰⁰
	2 EA 4 3/4" DRILL COLLARS	10.-5.	50. ⁰⁰
	SOS TRUCK DELIVERY	99./HR.	200. ⁰⁰
	SUB TOTAL		\$ 880. ⁰⁰
MARLIN Pacific: TRUCKING		70./HR	600. ⁰⁰
	6 3/4" Junk mill ✓	205./IN.	1435. ⁰⁰
	SUB TOTAL		\$ 2035. ⁰⁰
JET BAILER :	7" IMPRESSION BLOCK	PER JOB	196. ⁰⁰
	4" " "	" "	98. ⁰⁰
	4 3/8" " "	" "	110. ⁰⁰
	4 3/8" MAGNET	" "	100. ⁰⁰
	SUB TOTAL		\$ 504. ⁰⁰
MIDWAY Fighting:	7" WASHOVER SHOE ✓	155./IN	1085. ⁰⁰
	7" W/O EXTENSION	170./85.	170. ⁰⁰
	7" DRIVE SUB f/w/o	260./135.	260. ⁰⁰
	6 1/8 Junk mill ✓	185./IN.	1157. ⁰⁰
	3 EX. X-OVER SUBS	25./12.	75. ⁰⁰
	7 3/8" Bit	300. ⁰⁰ /JOB	300. ⁰⁰
	SUB TOTAL		\$ 3037. ⁰⁰
Homco Int.:	7 3/8" SHOE	150./IN.	1126. ⁰⁰
	7 3/8" W/O PIPE	290 /ft.	174. ⁰⁰
	7 3/8" DRIVE SUB	220./110.	220. ⁰⁰
	6" DRILL COLLAR	58./29	58. ⁰⁰
	6 3/8" mill, Junk ✓	185./IN	1226. ⁰⁰
	3 1/2 IF LIFTER	25./12.	37. ⁰⁰
	SUB TOTAL		\$ 2841. ⁰⁰
STEVE'S oilfield			
TRUCKING :	4 DELIVERIES	98. ⁰⁰ /HR.	800. ⁰⁰
Misc. UNBILLED: Tools & Equip.			500. ⁰⁰
	SUB TOTAL		\$ 1300. ⁰⁰



P.O. BOX 92527 LONG BEACH, CA 90809
PHONE 595-4505

Service Report

JOB No 49982

Company PETRO RESOURCES INC.

Lease NWLB.

Well 8-1

Date 6-2-92

Field Long Beach

Work Order No. _____

ROD RECORD

Size	No. Rods Pulled	No. Rods Run	No. Subs Pulled	No. Subs Run	Length

PUMP RECORD

Pump No. Out _____ Make _____ Size _____ Plunger _____ Mandrel _____

Pump No. In _____ Make _____ Size _____ Plunger _____ Mandrel _____

TUBING RECORD

Size	No. Joints Out	Feet	No. Joints Run	Depth of Shoe	Total Feet in Hole

Size of nipples in tubing string and location _____

Make of tubing catcher, anchor _____ Size _____ Amount of tubing above catcher _____

BAILING RECORD

Amount of tubing below catcher _____

Maker of bailer _____ Size _____ Bailed from _____ to _____ Formation _____

Fluid Level _____ Top. Perf. _____ Bottom Perf. _____ Zero Point _____

REMARKS Laid out R.9 MATS - MOVED IN mud Pump - M.R.U. MAST -
S.D. T. 11 A.M.

Well Went Off _____ A.M. _____ P.M. _____ 19 _____ Well Put On _____ A.M. _____ P.M. _____ 19 _____

	START	STOP	HOURS
HOIST			
MAST #4	2:30pm	4:30pm	2
SAND LINE			
PUMP			
SWIVEL			
PUSHER <u>R. LOHREY</u>	2:30pm	4:30pm	2
HELPER <u>H. MEDINA</u>			
HELPER <u>JUAN MEDINA</u>			
HELPER <u>E. HARTSOCK - TRAINER</u>			
HELPER			



P.O. BOX 92527 LONG BEACH, CA 90809
PHONE 595-4505

Service Report

JOB No 49983

Company PETRO RESOURCES INC.
Lease NWLB Well 8-1
Field LONG BEACH, CAL

Date 6-3-92
Work Order No. _____

ROD RECORD

Size	No. Rods Pulled	No. Rods Run	No. Subs Pulled	No. Subs Run	Length

PUMP RECORD

Pump No. Out _____ Make _____ Size _____ Plunger _____ Mandrel _____
Pump No. In _____ Make _____ Size _____ Plunger _____ Mandrel _____

TUBING RECORD

Size	No. Joints Out	Feet	No. Joints Run	Depth of Shoe	Total Feet in Hole

Size of nipples in tubing string and location _____

Make of tubing catcher, anchor _____ Size _____ Amount of tubing above catcher _____

BAILING RECORD

Amount of tubing below catcher _____

Maker of bailer _____ Size _____ Bailed from _____ to _____ Formation _____

Fluid Level _____ Top. Perf. _____ Bottom Perf. _____ Zero Point _____

REMARKS REMOVE WELL HEAD - M/4 7" IMPRESSION BLOCK - JET
BAILER - R.L.H. - STACKED OUT @ 551' - P.O.H. - DN. I.B.
1" WIDE MARK ON OUTSIDE OF FACE ON I.B. - R.L.H. W/ OPEN
END TBG. - STOPPED @ 551' - UNABLE TO WORK PAST 551'
P.O.H. - R.L.H. 7/8" COLLAR - STOPPED @ 551' UNABLE TO GET
PASSED 551' - P.O.H. - M/4 JET BAILER 4" I.B. & R.L.H. STACK
OUT @ 551' - P.O.H. - I.B. INDICATES PARTED OR BAD CSQ.
@ 551' - M/4 1 JT. 1 1/4" TBG. ON 2 1/2 TBG & R.L.H. - UNABLE
TO GET PASSED 551' W/ 1 1/4" TBG - P.O.H. - SECURE WELL
LAY WATER LINE TO WELL 8-1

Rig & Crew 1503⁰⁰

Well Went Off _____ A.M. _____ P.M. _____ 19 _____ Well Put On _____ A.M. _____ P.M. _____ 19 _____

	START	STOP	HOURS
HOIST <u>#4</u>	<u>6:30 AM</u>	<u>3:30 PM</u>	<u>9 HRS</u>
MAST			
SAND LINE			
PUMP			
SWIVEL			
PUSHER <u>R. WHEELER</u>	<u>6:30 AM</u>	<u>3:30 PM</u>	<u>9 HRS</u>
HELPER <u>A. MEDINA</u>	<u> </u>	<u> </u>	<u> </u>
HELPER <u>M. MEDINA</u>	<u> </u>	<u> </u>	<u> </u>
HELPER <u>E. HARTSOCK</u> <u>-TRN.</u>	<u> </u>	<u> </u>	<u> </u>



BOX 92527 LONG BEACH, CA 90809
PHONE 595-4505

Service Report

JOB No 49984

Company PETRO RESOURCES Inc.

Date 6-4-92

Lease NWLB Well 8-1

Work Order No. _____

Field LONG BEACH, CA.

ROD RECORD

Size	No. Rods Pulled	No. Rods Run	No. Subs Pulled	No. Subs Run	Length

PUMP RECORD

Pump No. Out _____ Make _____ Size _____ Plunger _____ Mandrel _____

Pump No. In _____ Make _____ Size _____ Plunger _____ Mandrel _____

TUBING RECORD

Size	No. Joints Out	Feet	No. Joints Run	Depth of Shoe	Total Feet in Hole

Size of nipples in tubing string and location _____

Make of tubing catcher, anchor _____ Size _____ Amount of tubing above catcher _____

BAILING RECORD _____ Amount of tubing below catcher _____

Maker of bailer _____ Size _____ Bailed from _____ to _____ Formation _____

Fluid Level _____ Top. Perf. _____ Bottom Perf. _____ Zero Point _____

REMARKS MOVE IN POWER SWIVEL & N/UP SAME & HANG BACK IN DERRECK.
N/UP HOSES & CROSS-OVER SPOOL TO PGSR. SHUT ON UNTIL AM 6-5-92
TO RECEIVE WASH OVER PIPE & MISC. C/O & FISHING TOOLS.

#584.50

Fig & Crew

#40.00

Sub Pay

No Accidents

Well Went Off _____ A.M. _____ P.M. _____ 19 _____ Well Put On _____ A.M. _____ P.M. _____ 19 _____

	START	STOP	HOURS
HOIST <u>#4</u>	<u>6:30 AM</u>	<u>10:00 AM</u>	<u>3.5</u>
MAST			
SAND LINE			
PUMP			
SWIVEL			
PUSHER <u>R. WHEELER</u>	<u>6:30 AM</u>	<u>10:00 AM</u>	<u>3.5</u>
HELPER <u>A. MEDINA</u>	<u>6:30 AM</u>	<u>10:00 AM</u>	<u>3.5</u>
HELPER <u>M. MEDINA</u>	<u>6:30 AM</u>	<u>10:00 AM</u>	<u>3.5</u>
HELPER <u>E. HARTSOCK</u>	<u>6:30 AM</u>	<u>10:00 AM</u>	<u>3.5</u>
HELPER			



DX 92527 LONG BEACH, CA 90809
PHONE 595-4505

Service Report

JOB No 49985

Company PETRO RESOURCES INC.

Date 6-5-92

Lease NWLB Well 8-1

Work Order No. _____

Field LONG BEACH CA.

ROD RECORD

Size	No. Rods Pulled	No. Rods Run	No. Subs Pulled	No. Subs Run	Length

PUMP RECORD

Pump No. Out _____ Make _____ Size _____ Plunger _____ Mandrel _____

Pump No. In _____ Make _____ Size _____ Plunger _____ Mandrel _____

TUBING RECORD

Size	No. Joints Out	Feet	No. Joints Run	Depth of Shoe	Total Feet in Hole
DAILY COST ON FISHING TOOLS			\$ 2465.00	APPROX.	

Size of nipples in tubing string and location _____

Make of tubing catcher, anchor _____ Size _____ Amount of tubing above catcher _____

BAILING RECORD Amount of tubing below catcher _____

Maker of bailer _____ Size _____ Bailed from _____ to _____ Formation _____

Fluid Level _____ Top. Perf. _____ Bottom Perf. _____ Zero Point _____

REMARKS: SERVICE RIG & COMPONENTS. RIG W/ OPEN-ENDED TBL. & CHANGE OVER TO FRESH WATER; CIRC. FLUID. RECEIVE & UNLOAD WASH-OVER & MISC. TOOLS. PICK UP OTHER WID TOOLS & MEAS. MILL & RIG W/ 7 3/8" O.D. T/C FLAT BTM. SHOE. WASH OVER & 551.43' KB TO 554.43' +/- SHOE ID 6 1/4" INDICATED. APPROX. 1' OF FISH ENTERED FULL GAGE OF SHOE. 20-30,000# STRING WT TO PULL FREE BEFORE POH. STRING UP-DN. RT WTS. WERE 10,000#. DISCONTINUED WID OPER. DUE TO LACK OF COLLAR WT. SECURE WELL & SHUT DN. UNTIL AM 6-8-92 ORDERED 2 EA 30' W/ 52# / FT D.C. & CO BORE SHOE & ADD CUTTER SURFACE TO INSIDE BORE & W/O.

CREW ONLY	6 HRS @ 117.00	Total	702.00
RIG & CREW	4 HRS @ 167.00	Total	468.00
SUB PAY		Total	40.00
POWER SWIVEL & MUD PUMP	@ 300.00 EA	Total	600.00
NO ACCIDENTS			

1810.00

Well Went Off _____ A.M. _____ Well Put On _____ A.M. _____
Production _____ P.M. _____ 19 _____ Production _____ P.M. _____ 19 _____

	START	STOP	HOURS
HOIST 4	6 AM	4 PM	10
MAST			
SAND LINE			
PUMP			
SWIVEL			
PUSHER R. WHEELER	6 AM	4 PM	10
HELPER A. MEDINA	6 AM	4 PM	10
HELPER M. MEDINA	6 AM	4 PM	10
HELPER G. HARTSOCK	6 AM	4 PM	10
HELPER			



DX 92527 LONG BEACH, CA 90809
PHONE 595-4505

Service Report

JOB No 49986

Company Libco Service Inc.

Date 6-8-92

Lease NWLB Well 8-1

Work Order No. _____

Field LONG BEACH

ROD RECORD

Size	No. Rods Pulled	No. Rods Run	No. Subs Pulled	No. Subs Run	Length

PUMP RECORD

Pump No. Out _____ Make _____ Size _____ Plunger _____ Mandrel _____

Pump No. In _____ Make _____ Size _____ Plunger _____ Mandrel _____

TUBING RECORD

Size	No. Joints Out	Feet	No. Joints Run	Depth of Shoe	Total Feet in Hole

Size of nipples in tubing string and location _____

Make of tubing catcher, anchor _____ Size _____ Amount of tubing above catcher _____

BAILING RECORD Amount of tubing below catcher _____

Maker of bailer _____ Size _____ Bailed from _____ to _____ Formation _____

Fluid Level _____ Top. Perf. _____ Bottom Perf. _____ Zero Point _____

REMARKS See Equip. Nup & RIH w/ 7" H-90 WASHOVER SHOE, EXTENSION, Top Sub, Spindal mill x 6 1/8" OD TAG w/ 7 3/8" OD w/ 6 1/4" ID w/ T/C on 8m, ID @ 550.35 +/-, DEPS. OVER TO 533' TORQUE UP P/UP TO 32,000* STRNG WT 13,000* & PULL FREE. Attempt to WORK OVER AGGT BACK TO 555' UNABLE TO GET BELOW 534', UNABLE TO GET TOOLS TO LOCATION UNTIL AM 6-8-92 SECURE WELL & SHUT ON UNTIL Tomorrow.

<u>Ric & Crew</u>	<u>\$918.50</u>	} <u>\$1558.50</u> <u>Daily Cost</u>
<u>Sub Pay</u>	<u>40.00</u>	
<u>Lower Swivel</u>	<u>300.00</u>	
<u>Mud Pump</u>	<u>300.00</u>	

No Accidents

Well Went Off _____ A.M. _____ Well Put On _____ A.M. _____
Production _____ P.M. _____ 19 _____ Production _____ P.M. _____ 19 _____

	START	STOP	HOURS
HOIST <u>4</u>	<u>6:30 AM</u>	<u>12 PM</u>	<u>5 1/2</u>
MAST			
SAND LINE			
PUMP			
SWIVEL			
PUSHER <u>R. Wheeler</u>	<u>6:30 AM</u>	<u>12 PM</u>	<u>5 1/2</u>
HELPER <u>A. MEDINA</u>	<u>6:30 AM</u>	<u>12 PM</u>	<u>5 1/2</u>
HELPER <u>J. MEDINA</u>	<u>6:30 AM</u>	<u>12 PM</u>	<u>5 1/2</u>
HELPER <u>G. HARTSOCK</u>	<u>6:30 AM</u>	<u>12 PM</u>	<u>5 1/2</u>
HELPER			



P.O. BOX 92527 LONG BEACH, CA 90809
PHONE 595-4505

Service Report

JOB No 49987

Company John J. Jaramila Inc.

Date 6-9-92

Lease NW & B Well 8-1

Work Order No. _____

Field Long Beach

ROD RECORD

Size	No. Rods Pulled	No. Rods Run	No. Subs Pulled	No. Subs Run	Length

PUMP RECORD

Pump No. Out _____ Make _____ Size _____ Plunger _____ Mandrel _____

Pump No. In _____ Make _____ Size _____ Plunger _____ Mandrel _____

TUBING RECORD

Size	No. Joints Out	Feet	No. Joints Run	Depth of Shoe	Total Feet in Hole

Size of nipples in tubing string and location _____

Make of tubing catcher, anchor _____ Size _____ Amount of tubing above catcher _____

BAILING RECORD

Maker of bailer _____ Size _____ Bailed from _____ to _____ Formation _____

Fluid Level _____ Top. Perf. _____ Bottom Perf. _____ Zero Point _____

REMARKS See Equip. Man. mpu & RTH of 7 7/8" O.D. x 6 7/8" I.D. Diamond windowed
friction shoe. Tag @ 552' +/- a wiper on. to 553' UNABLE to get below
553'. POK & Btm 2 diamonds bent out APPROX. 1' +/- OVER 1/2" of outside
of shoe showing wear. Dr. W/O a mpu & RTH of 7 7/8" O.D. x 6 7/8" I.D.
a DRILL 2' getting long strings of wood & wood w/ metal scales
POK 554' +/- 1" ON BIT & BIT SUB. SECURE WELL & SHUT DOWN TO
AM 6-10-92

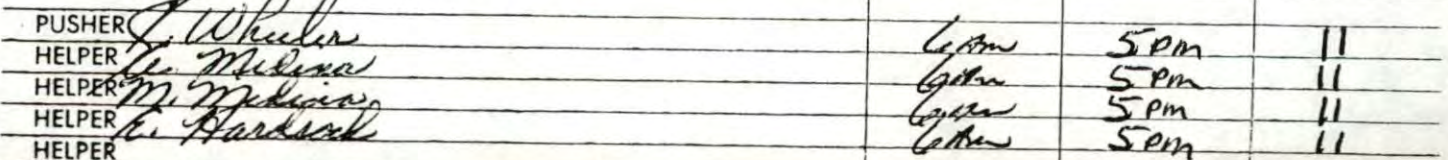
<u>Fig & Crew</u>	<u>\$1252.50</u>	
<u>SUB POK</u>	<u>40.00</u>	
<u>POWER SWIVEL</u>	<u>300.00</u>	<u>\$1892.50</u>
<u>MUD PUMP</u>	<u>300.00</u>	<u>total</u>

ND Acc.

Well Went Off _____ A.M. _____ Well Put On _____ A.M. _____
Production _____ P.M. _____ 19 _____ Production _____ P.M. _____ 19 _____

	START	STOP	HOURS
HOIST <u>#4</u>	<u>6:30 AM</u>	<u>2 PM</u>	<u>7 1/2</u>
MAST			
SAND LINE			
PUMP			
SWIVEL			

PUSHER <u>R. Whyles</u>	<u>6:30 AM</u>	<u>2 PM</u>	<u>7 1/2</u>
HELPER <u>H. Medina</u>	<u>6:30 AM</u>	<u>2 PM</u>	<u>7 1/2</u>
HELPER <u>E. Hardasch</u>	<u>6:30 AM</u>	<u>2 PM</u>	<u>7 1/2</u>
HELPER <u>J. Medina</u>	<u>6:30 AM</u>	<u>10 AM</u>	<u>3 1/2</u>
HELPER <u>M. Medina</u>	<u>10:00 AM</u>	<u>2 PM</u>	<u>4</u>





BOX 92527 LONG BEACH, CA 90809
PHONE 595-4505

Service Report

JOB No 49989

Company RETRO RESOURCES INC.

Lease N.W. L.B. Well 8-1

Field LONG BEACH

Date 6-11-92

Work Order No. _____

ROD RECORD

Size	No. Rods Pulled	No. Rods Run	No. Subs Pulled	No. Subs Run	Length

PUMP RECORD

Pump No. Out _____ Make _____ Size _____ Plunger _____ Mandrel _____

Pump No. In _____ Make _____ Size _____ Plunger _____ Mandrel _____

TUBING RECORD

Size	No. Joints Out	Feet	No. Joints Run	Depth of Shoe	Total Feet in Hole

Size of nipples in tubing string and location _____

Make of tubing catcher, anchor _____ Size _____ Amount of tubing above catcher _____

BAILING RECORD

Amount of tubing below catcher _____

Maker of bailer _____ Size _____ Bailed from _____ to _____ Formation _____

Fluid Level _____ Top. Perf. _____ Bottom Perf. _____ Zero Point _____

REMARKS: ✓ EQUIP. AIR COMPRESSOR LEAKING. WILL I SEE NOTIFY MECH. SERVICES.
MEAS. MILL & RIH AT 538' ON IMPRESSION BLOCK. TAG @ 557'. SET BLOCK WT. ON
SAME. SURE PICTURE. POH. A SHOW OF METAL CUTTINGS SETTLED ON OBSTRUCTION.
RIH AT 498' ON IMPACT. RECOVERED 3' COFFEE CAN FULL OF METAL FRAGMENTS LINED
W/ STRINGS OF WOOD. ON MANDREL. RIH AT 538' RE-RUN IB. METAL OBJECT IN MIDDLE
UNDETERMINED DEMENTIONAL CONFIGURATION. RIH AT 498' MILL & 4 1/4 X 5 7/8"
JUNK. SUB ABOVE MILL. TAG @ 557'. POINTS W/ TORQUE TO 557' UNABLE TO ESTABLISH TORQUE
POH & 4 1/4" OUTSIDE WEAR. 3 1/2" CIRCULAR W/ SLO 2" CENTER WEAR PATTERN.
SECURE WELL & SHUT ON.

RIG & CREW 108³⁰ } #1725⁵⁰ TOTAL
SWIVEL & PUMP 600⁰⁰
SUB PAY 40⁰⁰

No Acc.

Well Went Off A.M. _____ Well Put On A.M. _____
Production P.M. _____ 19 _____ Production P.M. _____ 19 _____

	HOIST	START	STOP	HOURS
MAST	4	6:30 AM	1 PM	6 1/2
SAND LINE				
PUMP				
SWIVEL				
PUSHER	F. WHITMAN	6:30 AM	1 PM	6 1/2
HELPER	G. MEDINA	6:30 AM	1 PM	6 1/2
HELPER	M. MEDINA	6:30 AM	1 PM	6 1/2
HELPER	G. HARD SOCK	6:30 AM	1 PM	6 1/2
HELPER				

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1																			
Former owner Sun Exploration & Production Co.		Date June 15, 1983																			
Name and location of well(s) Sec. 13-4S-13W S.B.B.&M. <table style="width:100%; border: none;"> <tr> <td style="width:33%;">NWLB 5-1 (037-09795)</td> <td style="width:33%;">NWLB 8-1 (037-09792)</td> <td style="width:33%;">NWLB 9-3 (037-09791)</td> </tr> <tr> <td>NWLB 5-2 (037-00397)</td> <td>NWLB 8-2 (037-09793)</td> <td>NWLB 9-4 (037-00392)</td> </tr> <tr> <td>NWLB 5-3 (037-09796)</td> <td>NWLB 8-3 (037-06496)</td> <td>NWLB 9-5 (037-00142)</td> </tr> <tr> <td>NWLB 5-4 (037-09797)</td> <td>NWLB 8-4 (037-06415)</td> <td>NWLB 9-6 (037-00393)</td> </tr> <tr> <td>NWLB 6-1 (037-09788)</td> <td>NWLB 8-7 (037-22512)</td> <td></td> </tr> <tr> <td>NWLB 6-2 (037-09789)</td> <td>NWLB 9-2 (037-13525)</td> <td></td> </tr> </table>				NWLB 5-1 (037-09795)	NWLB 8-1 (037-09792)	NWLB 9-3 (037-09791)	NWLB 5-2 (037-00397)	NWLB 8-2 (037-09793)	NWLB 9-4 (037-00392)	NWLB 5-3 (037-09796)	NWLB 8-3 (037-06496)	NWLB 9-5 (037-00142)	NWLB 5-4 (037-09797)	NWLB 8-4 (037-06415)	NWLB 9-6 (037-00393)	NWLB 6-1 (037-09788)	NWLB 8-7 (037-22512)		NWLB 6-2 (037-09789)	NWLB 9-2 (037-13525)	
NWLB 5-1 (037-09795)	NWLB 8-1 (037-09792)	NWLB 9-3 (037-09791)																			
NWLB 5-2 (037-00397)	NWLB 8-2 (037-09793)	NWLB 9-4 (037-00392)																			
NWLB 5-3 (037-09796)	NWLB 8-3 (037-06496)	NWLB 9-5 (037-00142)																			
NWLB 5-4 (037-09797)	NWLB 8-4 (037-06415)	NWLB 9-6 (037-00393)																			
NWLB 6-1 (037-09788)	NWLB 8-7 (037-22512)																				
NWLB 6-2 (037-09789)	NWLB 9-2 (037-13525)																				
Description of the land upon which the well(s) is (are) located																					
Date of transfer, sale, assignment, conveyance, or exchange May 1, 1983	New owner Petro Resources, Inc. Address 4200 Easton Drive, Suite 16 Bakersfield, CA 94309	Type of organization Corp. Telephone No. 805/323-4118																			
Reported by Letter from Sun Exploration & Production Co. dated 5-16-83.																					
Confirmed by Letter from Petro Resources, Inc., dated 5-18-83.																					
New operator new status (status abbreviation) PA	Request designation of agent Joe D. Rose, same address.																				
Old operator new status (status abbreviation) PA	Remarks																				

OPERATOR STATUS ABBREVIATIONS PA - Producing Active NPA - No Potential, Active PI - Potential Inactive NPI - No Potential, Inactive Ab - Abandoned or No More Wells	Deputy Supervisor V. F. Gaede	Signature
--	---	---------------

FORM AND RECORD CHECK LIST						
Form or record	Initials	Date	Form or record	Initials	Date	
Form OGD121	CP	7-7-83	Map and book	137	7/12/83	
Form ODG140	NONE		Notice to be cancelled			
New well cards	CP	7-7-83	Bond status			
Well records	CP	7-7-83	EDP files			
Electric logs	CP	7-7-83	Update			
Production reports			Conservation Committee			
			L. A. Assessors			

Name change from Sun Oil Co. to SUN EXPLORATION & PRODUCTION CO.

1-1-82, Form 156 dated 1-21-82. See ownership file.

805-259-2440

7 March 19, 19 79

Division of Oil and Gas

Gentlemen:

This is a request for a change of well designation for the following well (s):

Sec. 13, T. 45, R. 13W, 5B D. & M., Long Beach field,

Los Angeles County.

[illegible]

rs/Dave Williams 9/25/79
OK to use "NWLBU"

Sun Oil Co
(Name of Operator)

23928 Lyons Ave
(Address)

Newhall, Calif 91321

By John Smith

RECEIVED

MAR 29 10 51 AM '79

DIV. OF OIL AND GAS
LONG BEACH, CA.

March 19, 1979

Division of Oil and Gas

Gentlemen:

This is a request for a change of well designation for the following well (s):

Sec. 13, T. 45, R. 13W, SB B. & M., Long Beach field,

Los Angeles County.

<u>OLD</u> <u>WELL #</u>	<u>OLD DESIGNATION</u>	<u>OLD</u> <u>NAME</u> <u>POOL</u>	<u>NEW</u> <u>WELL #</u>	<u>NEW DESIGNATION</u>	<u>NEW</u> <u>NAME</u>
<u>1</u>	<u>03709795</u>		<u>5-1</u>	<u>NORTHWEST</u>	<u>Long BEACH UNIT</u>
<u>2</u>	<u>03700397</u>		<u>5-2</u>	<u>"</u>	<u>" " "</u>
<u>3</u>	<u>03709796</u>		<u>5-3</u>	<u>"</u>	<u>" " "</u>
<u>4</u>	<u>03709797</u>		<u>5-4</u>	<u>"</u>	<u>" " "</u>
<u>1</u>	<u>03709788</u>	<u>AMEB CO</u>	<u>6-1</u>	<u>"</u>	<u>" " "</u>
<u>2</u>	<u>03709789</u>		<u>6-2</u>	<u>"</u>	<u>" " "</u>
<u>2</u>	<u>03713525</u>	<u>FLOOD CONTROL</u>	<u>9-2</u>	<u>"</u>	<u>" " "</u>
<u>3</u>	<u>03709791</u>		<u>9-3</u>	<u>"</u>	<u>" " "</u>
<u>4</u>	<u>03700392</u>		<u>9-4</u>	<u>"</u>	<u>" " "</u>
<u>5</u>	<u>03700142</u>		<u>9-5</u>	<u>"</u>	<u>" " "</u>
<u>6</u>	<u>03700393</u>		<u>9-6</u>	<u>"</u>	<u>" " "</u>

Sun Oil Company
(Name of Operator)

23928 Lyons Avenue
(Address)

Newhall, Calif 91321

By Jack Andrews

RECEIVED

MAR 29 10 51 AM '79

DIV. OF OIL AND GAS
LONG BEACH, CA.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county Long Beach		District 1	
Former owner General Exploration Co.		Date February 15, 1979	
Name and location of well(s)			
<u>Sec. 11-4S-13W</u>		<u>Sec. 13-4S-13W</u>	
"Dominguez" 2-10 (037-11859)		"Flood Control" 6 (037-00393)	
<u>Sec. 13-4S-13W</u>		"Oil Operators" 1 (037-09792)	
"Amebco" 1 (037-09788)		"Oil Operators" 2 (037-09793)	
"Amebco" 2 (037-09789)		"Oil Operators" 3 (037-06496)	
"Flood Control" 2 (037-13525)		"Oil Operators" 4 (037-06415)	
"Flood Control" 3 (037-09791)		"Pool" 1 (037-09795)	
"Flood Control" 4 (037-00392)		"Pool" 2 (037-00397)	
"Flood Control" 5 (037-00142)		"Pool" 3 (037-09796)	
		"Pool" 4 (037-09797)	
Description of the land upon which the well(s) is (are) located		<u>Sec. 14-4S-13W</u>	
		"Dominguez" 1 (037-11858)	
Date of transfer, sale, assignment, conveyance, or exchange Dec. 1, 1978	New owner Sun Oil Company	Type of organization Corporation	
	Address 23928 Lyons Avenue Newhall, CA 91321	Telephone No.	
Reported by Former operator			
Confirmed by New operator			
New operator new status (status abbreviation) PA	Request designation of agent		
Old operator new status (status abbreviation) AB	Remarks		
Deputy Supervisor <i>for</i> M. B. Albright		Signature <i>Eleanor Bickel</i>	

OPERATOR STATUS ABBREVIATIONS		FORM AND RECORD CHECK LIST					
		Form or record	Initials	Date	Form or record	Initials	Date
PA - Producing Active							
NPA - No Potential, Active		Form OGD 121			Map and book	RB	2-16-79
PI - Potential Inactive		Form OGD 48			Notice to conserve		
NPI - No Potential, Inactive		New well cards			Bond status		
AB - Abandoned or No More Wells		Well records			EDP - log		
		Electric logs			ara		
		Production records			cc: EDP Update		
					Conservation Committee		
					Update Center		

(213) 590-5311

May 21, 1976

Mr. Robert L. Graves
GENERAL EXPLORATION CO.
4021 N. Pacific Place
Long Beach, California 90806

Dear Sir:

On May 20, 1976, Mr. G. W. Stark, our representative met with Bob Grey, your representative, to witness that one support piling was cut 20 feet below ground level. The Division approves of this method of pile removal if the holes are filled with tamped earth.

Sincerely,

ADS
A. D. Stockton
Associate Oil and Gas Engineer

ADS:dr

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or County **Long Beach** District **1**
 Former Owner: **Union Oil Co. of California** Date **January 17, 1961**
 Description of Property **Sec. 13, T. 4 S., R. 13 W., S. B. B. & M.**

List of Wells **"Oil Operators" 1, "Oil Operators" 2, "Oil Operators" 3 and "Oil Operators" 4. ("Oil Operators" 1, idle; other wells are active)**

Date of Transfer **January 1, 1961**
 New Owner: **General Exploration Co. of California**
 Address: **750 Subway Terminal Building, 417 South Hill Street, Los Angeles 13, Calif.**
 Telephone No. _____
 Type of Organization **Corporation**
 Reported by: **Union Oil Co. of California (Letter of January 6, 1961)**
 Confirmed by: **General Exploration Co. of California (Letter of January 11, 1961)**
 New Operator New Status **PA**, Old Operator New Status **PA**
 Request designation of agent **No**

Remarks:

eb

CC- Mr. E. H. Musser
 Prod. Dept.
 Conservation Committee

	INITIALS	DATE
Form 121	✓ <i>EB</i>	1-17-61
New Well Cards		
Well Records	✓ <i>EB</i>	1-17-61
Electric Logs	✓	✓
Production Reports	<i>CC Prod Dept</i>	✓
Map and Book <i>130</i>	<i>S.C.</i>	1-18-61
Form 148 <i>130</i>	<i>S.C.</i>	1-17-61
Notice to be cancelled	✓ <i>No</i>	✓ <i>RT 1/18/61</i>

Wm. C. Bailey
 Deputy Supervisor

LEGEND

PA—Producing Active
 NPA—Non Potential Active
 PI—Potential Inactive
 NPI—Non Potential Inactive
 Ab—Abandoned or No More Wells
 NOTE—If Transfer Does Not Change Overall Status Enter "No Change"

(S.W. & N.W. of inter. Concord Pl. & P.E. Ry.)

W. C. BAILEY
Deputy



STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

830 NORTH LA BREA AVENUE
INGLEWOOD 3, CALIFORNIA

DIVISION OF OIL AND GAS
RECEIVED

JAN 13 1961

INGLEWOOD, CALIFORNIA

January 11, 1961

General Exploration Co. of California
417 South Hill Street
Los Angeles 13, California

Gentlemen

We have been informed that on January 1, 1961, you acquired Union Oil Company of California wells No. "Oil Operators" 1, "Oil Operators" 2, "Oil Operators" 3 and "Oil Operators" 4, Sec. 13, T. 4 S., R. 13 W., S. B. B. & M., Long Beach field.

Please furnish us with the information requested below which may be submitted on the duplicate copy of this letter attached. Please complete the letter, sign and return it to this office as soon as possible.

Yours truly

WM. C. BAILEY
Deputy Supervisor

By J. R. Thomas
J. R. Thomas
Associate Oil & Gas Engineer

eb

1. Effective date you acquired the wells: January 1, 1961
2. Name and address of the person or company from whom you acquired the wells:
Union Oil Company of California
461 So. Boylston St., Los Angeles 17, California
3. What are your plans for the wells: Continue producing wells
4. Brief legal description of the property on which the wells are located:
Portions of Secs. 13 and 14, T. 4 S., R. 13 W., S.B.B. & M. in Long Beach
field shown on D.O.G. Map No. 20 as Union Oil Co. of Calif. "Oil Operators"
lease.

1-11-61
(Date)

GENERAL EXPLORATION COMPANY
OF CALIFORNIA

By [Signature]
(Signature)

UNION OIL COMPANY OF CALIFORNIA

UNION OIL CENTER

LOS ANGELES 17, CALIFORNIA

DIVISION OF OIL AND GAS
RECEIVED

JAN 10 1961

INGLEWOOD, CALIFORNIA

HAROLD H. STREAM
MANAGER OF LANDS

January 6, 1961

Wm. C. Bailey
Deputy Supervisor
Division of Oil and Gas
830 North La Brea Avenue
Inglewood 3, California

Re: LONG BEACH AREA
Los Angeles County, California
Oil Operators, Inc. Lease

Dear Mr. Bailey:

Pursuant to Article 4, Chapter 1, Division 3 of the Public Resources Code, notice is hereby given that Union Oil Company of California has sold and transferred to General Exploration Co. of California, 750 Subway Terminal Building, Los Angeles 13, California, effective as of 7:00 o'clock a.m., January 1, 1961, the following oil and gas wells:

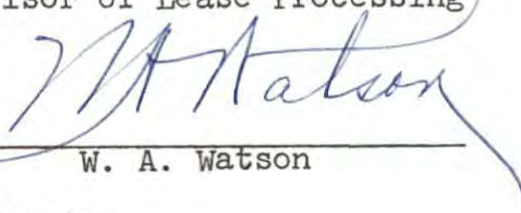
Section 13, Township 4 South, Range 13 West

Oil Operator #1 (Standing)
Oil Operator #2
Oil Operator #3
Oil Operator #4

Very truly yours,

G. B. Hall
Supervisor of Lease Processing

By


W. A. Watson

WAW/jb

cc: General Exploration Co. of California
750 Subway Terminal Building
Los Angeles 13, California

Attention: Mr. C. G. Willis, President

STENOGRAPHER

Forms Filed 102

Date Rec'd. 10-3-44

Electric Log /

Location /

Elevation /

ENGINEER

Form Needed none

Map Correction ✓

Form 150b (Date of Release)

At Request of Operator

Because Abandoned

Because Request by Oper.

Remarks ok rec for 10

subsequent work report
sent.

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

DIVISION OF OIL & GAS
RECEIVED
OCT 3 1944
LOS ANGELES, CALIFORNIA

OPERATOR Union Oil Company of California FIELD Long Beach

Well No. Oil Operators #1, Sec. 13, T. 4-S, R. 13-W, S. R. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated Sept. 8, 1939

, was filed.

SIGNED

Henry E. Winter

Date September 27, 1944

Title Division Engineer

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

Casing Record at Beginning of Work:

13-3/8" C 757'
8-5/8" C 4105' O.K.
505' 6-5/8" L 4529', inc. 50' perf.
C.P. 4475' - Top 161' is Securaloy

Casing Record at End of Work:

13-3/8" C 757'
8-5/8" C 4105' O.K.
505' 6-5/8" L 4529', inc. 50' perf.
C.P. 4475' - Top 161' is Securaloy

1944	Depth	Effective Depth	Remarks
8-26	4532	Liner 4529	Rigged up to plug and perforate higher.
9-1	4532	Plug 4443	Cleaned out sand from 4497 to 4529'. Dumped 15 sacks of Blue Diamond construction cement in stages to fill from 4529 to 4443'. Location of plug at 4443' witnessed by Division of Oil and Gas.
9-4	4532	Plug 4443	Bailed out 143 barrels of oil and 8 barrels of water to lower fluid level from 525' to 1105'. <u>Note:</u> Apparently the Securaloy or some other part of the liner was letting fluid through, as all of the perforations were plugged.
9-8	4532	Plug 4124	Set 6-5/8" Cavins drillable bridge plug at 4200'. Dumped 8-1/2 sacks of Blue Diamond construction cement in stages to fill from 4200 to 4124'. Bailed out 194 barrels of water to lower fluid level from 830 to 1725'. Slight show of oil. <u>Note:</u> Securaloy liner must be defective since plug in 6-5/8" is only 21' from shoe of 8-5/8" and 6-5/8" has not been perforated.
9-10	4532	Plug 4124	Ran rods and 3-1/2" upset tubing to 2419' overall and put well to pumping.

Production Data

Hrs.	Gross	Net	Gravity	Cut	Remarks
9-12	24	713	0	100.0	
9-14	24	698	0	100.0	
9-16	18	428	0	100.0	Changed pump.
9-18	24	640	0	100.0	
9-20	24	610	0	100.0	

MAP	MAP BOOK	CARDS	BOND	FORMS
				114 121

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-43185

Mr. W. S. Eggleston,
Los Angeles 14, Calif. September 8, 19 44.
Los Angeles 14, Calif.
Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "Oil Operators" 1 Sec. 13, T. 4 S, R. 13 W, S.B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
A. Pfeil, Inspector, representative of the supervisor,
on Sept. 1, 19 44. There was also present William Falconer, Driller, and
Leo Murry, Helper.

Casing Record 13-3/8" cem. 757'; 8-5/8" cem. 4105'; W.S.O. Junk None
6-5/8" 4024'-4529', c.p. 4475', perf. 4479'-4529'; T.D.
4532', plugged with cement 4529'-4443'.

The operations were performed for the purpose of testing the location and hardness of a cement
plug placed from 4529' to 4443' in the process of plugging.

The inspector arrived at the well at 2:15 p.m. and Mr. Falconer reported:

1. The hole was cleaned out to 4529'.
2. On August 31, 1944, 10 sacks of cement was dumped at 4529'; and on September 1, 1944, an additional 5 sacks was dumped.

THE INSPECTOR NOTED THAT the bailer could not be spudded below 4443' and brought up a sample of set cement.

The test was completed at 3:15 p. m.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 4443' ARE APPROVED.

cc - Mr. H. E. Winter
- Long Beach

AP:my

L/R.

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Musser Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-39843

Los Angeles 14,

Calif.

July 19,

19 44

Mr. W. S. Eggleston

Los Angeles 14,

Calif.

121

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your _____ proposal to plug & alter casing Well No. "Oil Operators" 1,
Section 13, T. 4 S., R. 13 W. S.B. B. & M., Long Beach Field, Los Angeles County,
dated July 15, 19 44, received July 18, 19 44, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.

Total depth 4532'

13-3/8" C 757'

8-5/8" C 4105' O.K.

505' 6-5/8" L 4529', inc. 50' perf. C.P. 4475' (Top 161 ft. of liner Securaloy)

Well is non-commercial.

2. <u>June, 1944 Prod.</u>	<u>82</u>	<u>22.1</u>	<u>99.3 (29 days)</u>
(Date)	(Net Oil)	(Gravity)	(Out)"

PROPOSAL:

"The proposed work is as follows:

1. Clean out to 4529' and plug with cement to 4455'.

2. Test plug by Division of Oil and Gas.

3. Make casing test and if O.K., perforate 4250-4270'.

4. If casing test is wet, cement 4-3/4" casing 4020-4300'.

5. Perforate 4250-4270 and test.

6. If wet, plug to 4230' and test plug by Division of Oil and Gas.

7. Perforate 4105 to 4120 and test."

DECISION:

THE PROPOSAL IS APPROVED.

KRMA:OH

cc- P. A. W.
H. E. Winter
Long Beach

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Messer Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
JUL 18 1944

LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs, Calif. July 15, 19 44

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling~~ plugging or altering casing at well No. Oil Operators 1
(Cross out unnecessary words)

Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.
Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

1. Complete casing record.
Total depth 4532'
13-3/8" C 757'
8-5/8" C 4105' O.K.
505' 6-5/8" L 4529', inc. 50' perf. C.P. 4475' (Top 161 ft. of liner Securaloy)
Well is non-commercial.

2. ~~Last produced~~ June, 1944 Prod. 82 22.1 99.3 (29 days)
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Clean out to 4529' and plug with cement to 4455'.
2. Test plug by Division of Oil and Gas.
3. Make casing test and if O.K., perforate 4250-4270'.
4. If casing test is wet, cement 4-3/4" casing 4020-4300'.
5. Perforate 4250-4270 and test.
6. If wet, plug to 4230' and test plug by Division of Oil and Gas.
7. Perforate 4105 to 4120 and test.

plug & alter casing

MAP MAP BOOK CARDS BOND FORMS
114 121

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By Henry E. Winter
Division Engineer.

cc: P. A. W. # 99071

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Subsequent Work Report

OPERATOR Union Oil Co. of Calif. FIELD Long Beach
Well No. Oil Operators #1, Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

In compliance with the provisions of Chapter 718, Statutes 1915, as amended, the information given herewith is a complete and correct record of all work done on the well since the previous record, dated 11-12-1937, was filed.

SIGNED _____

Henry E. Winter

Date 9-8-39Title Division Engineer

(President, Secretary or Agent)

Outline in the order of performance, together with the dates thereof, all important operations which alter the condition of the well. Include such information as depth at which redrilling operations were started, size of hole redrilled or deepened; size of pipe, amount of perforations in casing, weight and length of casing landed or cemented or removed; number of sacks of cement used in cementing or plugging operations and exact position thereof. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date _____

CSG- RECORD AT BEGINNING OF WORKCSG. RECORD AT PRESENT

DATE	DEPTH	EFF-DEPTH	DATE	DEPTH	EFF-DEPTH
13-3/8 C 757			13-3/8 C 757		
8-5/8 C 4105 OK			8-5/8 C 4105 OK		
68-6-5/8 L 4155 inc 47 perf.			505-6-5/8 L 4529 inc 50 perf.		
			C P 4475		

DATE DEPTH EFF-DEPTH

7-31-39 4155

8-10-39 4254

8-17-39 4532

8-21-39 4532

8-22-39 4532

8-25-39 4532

8-26-39

8-27-39

9-1-39

9-4-39

Rig up to pull liner and deepen.
Cut and pulled all of liner. Deepening.

Deepened to 4532. 505.15 - 6-5/8 landed 4529 (hung on Burns line hanger) inc 49.82 of 120 mesh (12-1-1/2-6) Kobe and cemented thru Baker whirler basket at 4475 with 125 sacks Victor Oil Well cement. Top 160.91 of liner is 6-5/8 Securaloy.

C.O. to 4150. Top of cement 3794. Bailed fluid to 2810. Splice O K by Division of Oil and Gas.

C.O. to 4528. Bailing.

Ran 4433 - 3" tubing and rods. Rigged up pumping unit.

251 gross	184 Net	22.8	26.5%	P 13 hr
254 "	248 "	22.0	2.5%	P 24 hr
241 "	226 "	22.0	6.1%	P 24 hr
235 "	201 "	22.0	14.3%	P 24 hr

DIVISION OF OIL AND GAS
RECEIVED
SEP 14 1933
LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator Union Oil Company of Calif. Field Long Beach

Well No. Oil Operators #1 Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL *Herry E Winter*

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4155	4532	377	Drilled & Cored	(See core record)	
	Quit on shell				

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

SMB

LONG BEACH

FIELD

UNION OIL

COMPANY

OIL OPERATORS

LEASE

#1

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
8-11-39	1	7-5/8" Elliott	4375	4385	9.8			9.8		Firm to hard medium to coarse gray sand - Dip 16°		
"	2	"	4385	4395	10.1			8.3		Firm to hard medium to coarse gray sand		
						0.1		1.7		Irregular inclusion of brown shale		
						0.1		10.0		Firm, fine to medium broken gray sand		
"	3	"	4395	4405	10.1			0.5		Firm, fine dark gray sand		
								9.6		Firm, coarse to medium gray sand		
								10.1				
"	4	"	4405	4415	11.9			3.0		Firm, soft medium gray sand		
								0.8		Firm, fine dark gray slightly argillaceous gray sand		
								5.9		Firm soft medium gray sand		
								2.2		Firm to firm soft, fine dark gray sand		
								11.9				
	5	"	4415	4425	10.6			10.6		Firm soft medium gray sand		
"	6	"	4425	4435	8.0			8.0		Firm soft medium gray sand		
8-12-39	7	7-5/8" Elliott	4435	4445	5.3	0.2				Hard brown shale		
								3.7		Firm soft fine to medium gray sand		
						0.1				Hard brown shale		
								0.1		Medium gray sand		
						0.2				Hard brown shale with streaks of fine gray sand		
								1.0		Soft medium gray sand with inclusion of brown shale 0.3 from top		
						0.5		4.8				
"	8	"	4445	4455	6.0	3.0				Hard fractured brown shale with high angle fracturing. Crushed zones at bottom and 1.4 from top		
						2.3				Hard massive brown shale		
						0.7				Hard broken brown shale		
						6.0						
"	9	"	4455	4465	11.3	11.3				Hard brown shale. Parts at angle of 30-35°		
"	10	"	4465	4475	4.2	4.2				Hard brown shale		

Henry E Winter

UNION OIL COMPANY OF CALIFORNIA

CORE RECORD

LONG BEACH

FIELD

UNION OIL

COMPANY

OIL OPERATORS

LEASE

#1

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
8-12-39	11	7-5/8" Elliott	4475	4485	9.6	4.7	0.1			Hard brown shale, slightly silty in spots. 0.3 at top broken. Streaks of fine brown oil sand in bottom 1.6		
							0.1			Firm fine brown oil sand		
						0.5				Hard slightly silty brown shale with partings of fine brown oil sand		
							2.3			Firm to firm soft, fine brown oil sand, grading to medium at bottom. Good odor and dark amber cut		
						0.6				Hard silty brown shale with streaks and partings of fine brown oil sand		
							0.8			Firm soft to soft, medium brown oil sand. Good odor and dark amber cut		
						0.2				Hard brown shale		
							0.3			Firm, fine slightly argillaceous brown oil sand		
						6.0	3.6					
"	12	"	4485	4490	4.7		0.1			Firm fine dark brown oil sand		
						0.1				Hard brown shale		
							0.6			Firm fine brown oil sand. Good odor and dark amber cut		
						0.1				Hard brown shale		
							0.6			Firm soft medium brown oil sand		
						0.2				Hard slightly silty brown shale		
							2.3			Soft fine brown oil sand, mixed with mud		
						0.1				Hard brown shale		
							0.1			Soft fine brown oil sand		
						0.5				Hard brown shale, apparent dip 30°		
						1.0	3.7					
"	13	"	4490	4500	2.7	1.5				Hard broken brown shale, apparent dip 30°		
						1.2				Hard broken brown shale, badly broken in coring and mixed with mud.		
						2.7				0.1 crushed zone at top		
"	14	"	4500	4510	0.0					No recovery		
"	15	"	4510	4515	0.0					No recovery		
8-13-39	16	"	4515	4520	0.0					No recovery		

Henry E. Winter

UNION OIL COMPANY OF CALIFORNIA CORE RECORD

LONG BEACH

UNION OIL

OIL OPERATORS

#1

FIELD

COMPANY

LEASE

WELL

LOCATION

ELEVATION

DATE	CORE NO.	DRILLER SIZE & TYPE BARREL	FROM	TO	TOTAL RECRY.	SHALE	OIL SAND	GRAY SAND	SHELL	DESCRIPTION OF CORE	APPT. DIP	ANGLE OF HOLE
8-13-39	17	7-5/8" Elliott	4520	4525	5.8		3.6 2.2 5.8			Firm medium brown oil sand, grading to coarse pebbly brown oil sand Firm soft fine brown oil sand, good odor and dark amber cut		
"	18	"	4525	4530	5.7		3.4 2.3 5.7			Firm soft medium to coarse, slightly pebbly in spots, brown oil sand Good odor and dark amber cut Firm soft fine grading to medium brown oil sand, good odor and dark amber cut		
"	19	"	4530	4532	2.9		2.9 2.9			Firm soft to soft coarse, slightly pebbly brown oil sand. Fair odor and dark amber cut. Sand does not look too good		
					T.D.	4532	8-13-39					

Henry E. Winter

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

No. 5735

DIVISION OF OIL AND GAS

Union Oil Co of Calif

LOS ANGELES

Calif. 9/15 1939

Name of Operator

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 4S
R. 13N - Long Beach B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work

See log - Oil Operators 1 - 8/13/30

R. D. BUSH, State Oil and Gas Supervisor

By E. J. Augenstein

Deputy

DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-36446

Los Angeles, Calif. August 29, 19 39

Mr. W.S. Eggleston,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Operations at your well No. "OIL OPERATORS" 1 Sec. 13, T. 4S., R. 13W., S. B. B. & M.,
Long Beach Field, in Los Angeles County, were witnessed by
G. Peirce, Engineer, representative of the supervisor,
on August 21, 19 39. There was also present H. E. Winter, Engineer,
and H. C. Richardson, Foreman.

Casing Record <u>13-3/8" cem. 757'; 8-5/8" cem. 4105';</u>	Junk <u>None.</u>
<u>W.S. O.; 6-5/8" liner 4024'-4529', c. p. 4475', perf.</u>	
<u>4479'-4529'. T. D. 4532', plugged with cement</u>	
<u>4475'-?</u>	

The operations were performed for the purpose of demonstrating that fluid does not have access
to the well between the 6-5/8" and 8-5/8" casings,

and the data and conclusions are as follows:

ENGINEER PEIRCE ARRIVED AT THE WELL AT 11:45 P. M. AND MR. WINTER REPORTED THE FOLLOWING:

1. The 6-5/8" liner landed at 4155' was all recovered.
2. An 8 1/2" rotary hole was drilled from 4105' to 4532'.
3. Mud fluid was circulated 4 hr. before cementing the casing.
4. Electrical core readings showed the following: 4440' - 4480' - shale (J-K).
5. On August 17, 1939, 505' of 6-5/8" casing (top 161' Securaloy, bottom 344' - 26 lb.), including 50' of perforated, was landed at 4529' and was cemented through perforations at 4475' with 125 sacks of Victor cement.
6. Cement was drilled out of the 8-5/8" and 6-5/8" casings from 3794' to 4035', equivalent to 68 sacks, and the casing was cleaned out to 4150'.
7. The fluid was bailed to 2800' at 4:45 p. m., on August 21, 1939.

ENGINEER PEIRCE NOTED THE FOLLOWING:

1. The fluid rose 10' in 7 1/4 hr., equivalent to 1 bbl. per 24 hr.
2. The hole was open to 4200'.

The test was completed at 12:30 a. m.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT fluid does not have access to the well between the 6-5/8" and 8-5/8" casings.

cc- H. E. Winter
Long Beach

GP:G

R. D. BUSH

State Oil and Gas Supervisor

By

E. H. [Signature]

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-34051

Los Angeles, Calif. July 26, 1939.

Mr. W. S. Eggleston,

Los Angeles, Calif.

Agent for UNION OIL COMPANY OF CALIFORNIA

DEAR SIR:

Your proposal to deepen Well No. "OIL OPERATORS" 1,
Section 13, T. 4 S., R. 13 W., S.B. B. & M., Long Beach Field, Los Angeles County,
dated July 24, 1939, received July 26, 1939, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

4155' deep

13-3/8" C 757'

8-5/8" C 4105' O.K.

68' 6-5/8" L 4155', inc. 47' perf.

June, 1939 production 1034 oil, 16,287 water - 30 days."

PROPOSAL:

"The proposed work is as follows:

1. Pull 6-5/8" liner.

2. Deepen to approximately 4535'.

3. Land 6-5/8" liner, including 110' perforated, at 4535' and cement through perforations at approximately 4425'."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT THIS DIVISION SHALL BE NOTIFIED TO WITNESS a test after drilling out the cement to within 50' of the cementing point to demonstrate that no fluid has access to the well between the 6-5/8" and 8-5/8" casings.

cc- H. E. Winter
Long Beach
WJC:OH

ELB

R. D. BUSH

State Oil and Gas Supervisor

By *Augenstein* Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUL 26 1939
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given fifteen days before work begins when possible

Santa Fe Springs Calif. July 24 19 39

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of deepening, ~~redrilling, plugging or altering casing~~ well No. Oil Operators #1
(Cross out unnecessary words)

Sec. 13, T. 4-S, R. 13-W, S.B. B. & M.

Long Beach Field, Los Angeles County.

The present condition of the well is as follows:

4155' deep

13-3/8" C 757'

8-5/8" C 4105' O.K.

68' 6-5/8" L 4155', inc. 47' perf.

June, 1939 production 1034 oil, 16,287 water - 30 days

The proposed work is as follows:

1. Pull 6-5/8" liner.
2. Deepen to approximately 4535'.
3. Land 6-5/8" liner, including 110' perforated, at 4535' and cement through perforations at approximately 4425'.

Reference to file of data

Maps	Meters	Cross Section	Cards	Pages	
				174	181
				✓	✓

UNION OIL COMPANY OF CALIFORNIA

(Name of Operator)

By Henry E. Winter
Division Engineer

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOS ANGELES

No. 2558

Calif. 11/30 19 37

Union Oil Co of Calif
Name of Operator

LOS ANGELES

Address

This is to acknowledge the receipt of logs and similar records of wells on Sec. 13 T. 4S
R. 13 W - Long Beach B. & M., as herewith enumerated by well numbers.

Logs

History

Core record

Subsequent work

See log - "Oil Operators, Inc" 1 - 11/1/37

R. D. BUSH, State Oil and Gas Supervisor

DUPLICATE

By E. Augenstein Deputy